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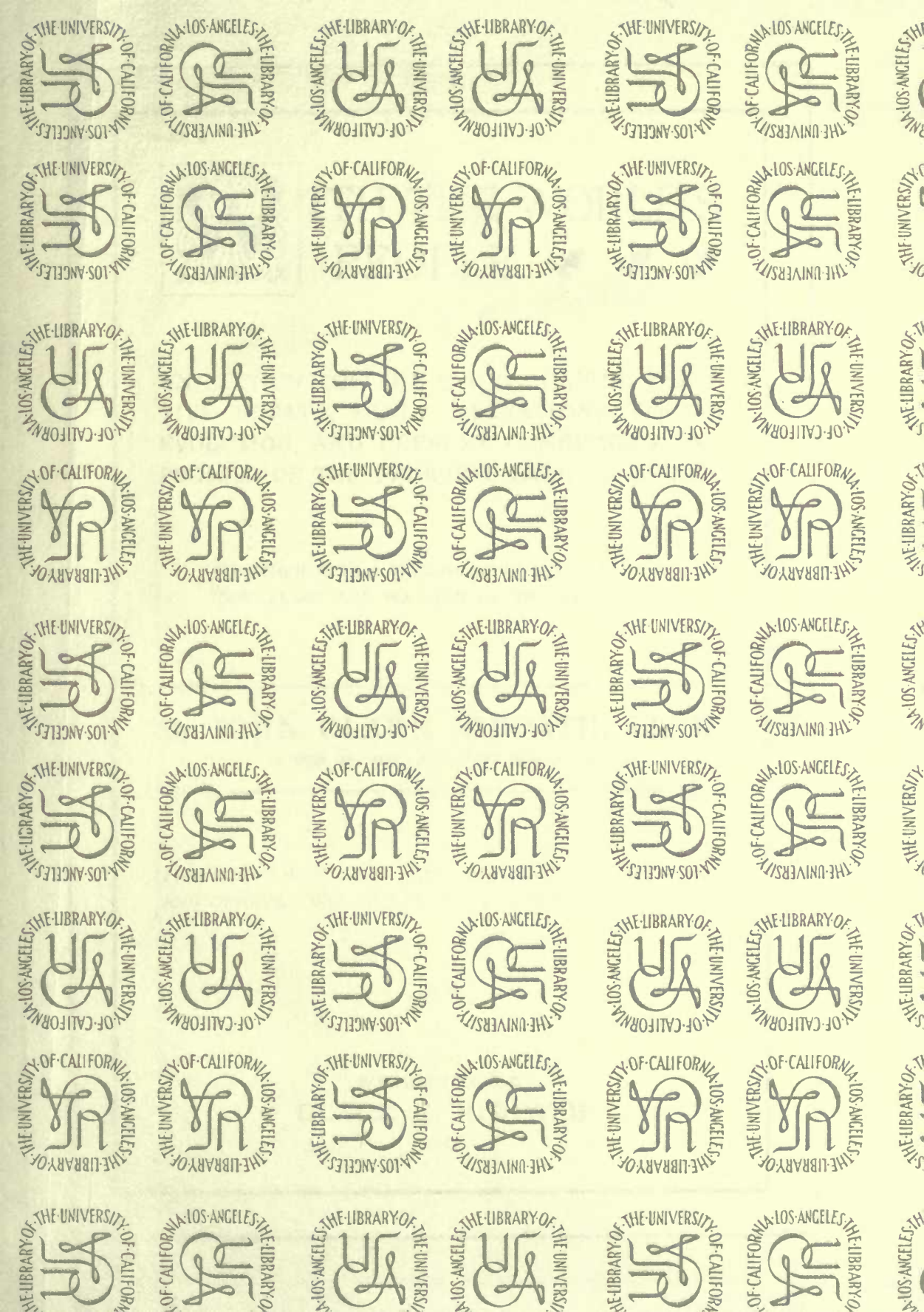
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WITH THE WORLD'S PEOPLE

AN ACCOUNT OF THE ETHNIC ORIGIN, PRIMITIVE ESTATE, EARLY MIGRATIONS, SOCIAL EVOLUTION, AND PRESENT CONDITIONS AND PROMISE OF THE PRINCIPAL FAMILIES OF MEN

TOGETHER WITH A PRELIMINARY INQUIRY ON THE TIME, PLACE AND MANNER OF THE BEGINNING

By JOHN CLARK RIDPATH, LL. D.

AUTHOR OF "HISTORY OF THE WORLD," ETC.

PROFUSELY ILLUSTRATED WITH COLORED PLATES, RACE MAPS AND CHARTS, TYPE PICTURES, SKETCHES, AND DIAGRAMS

WASHINGTON, D. C.

CLARK E. RIDPATH

1912

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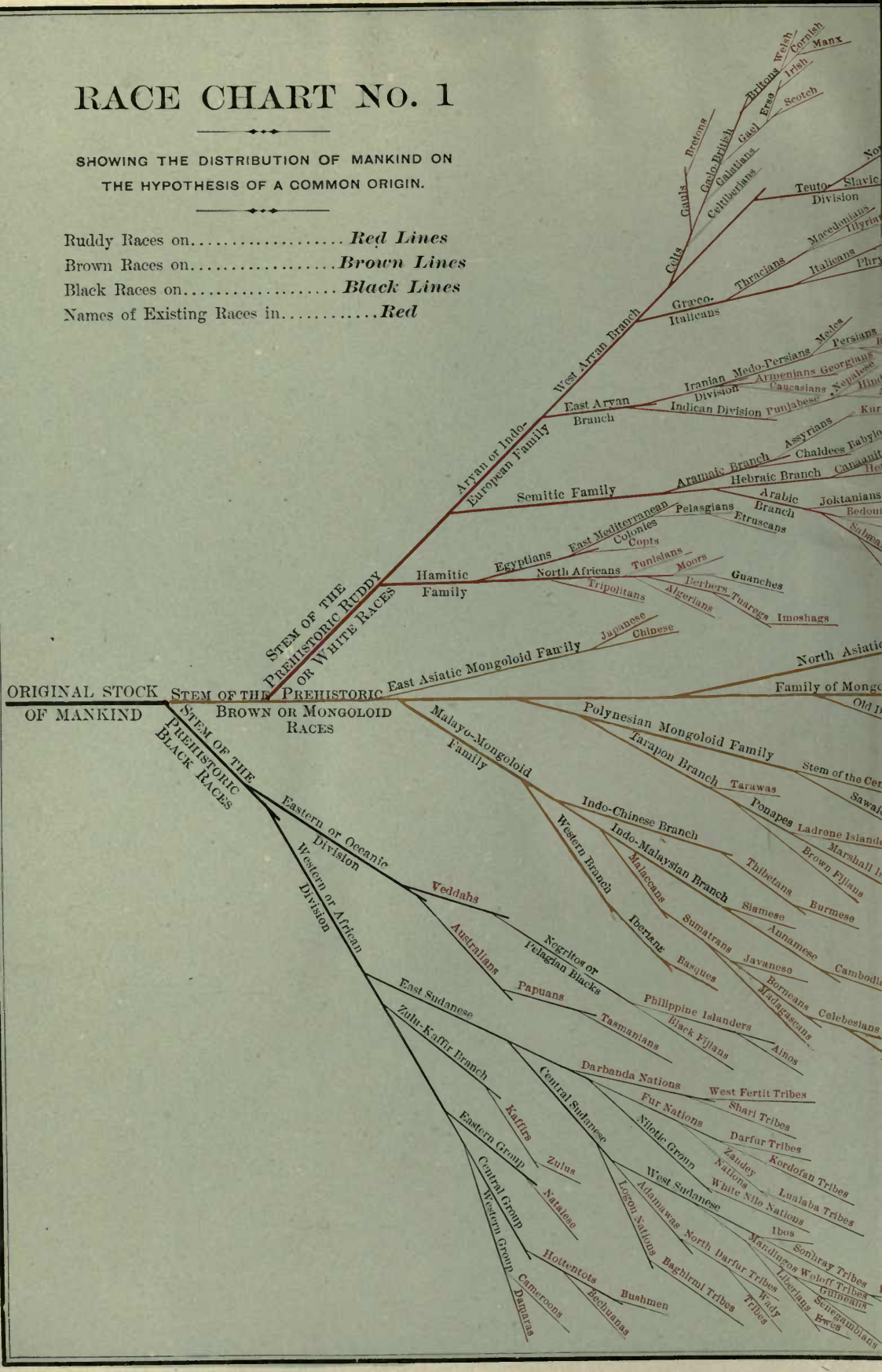
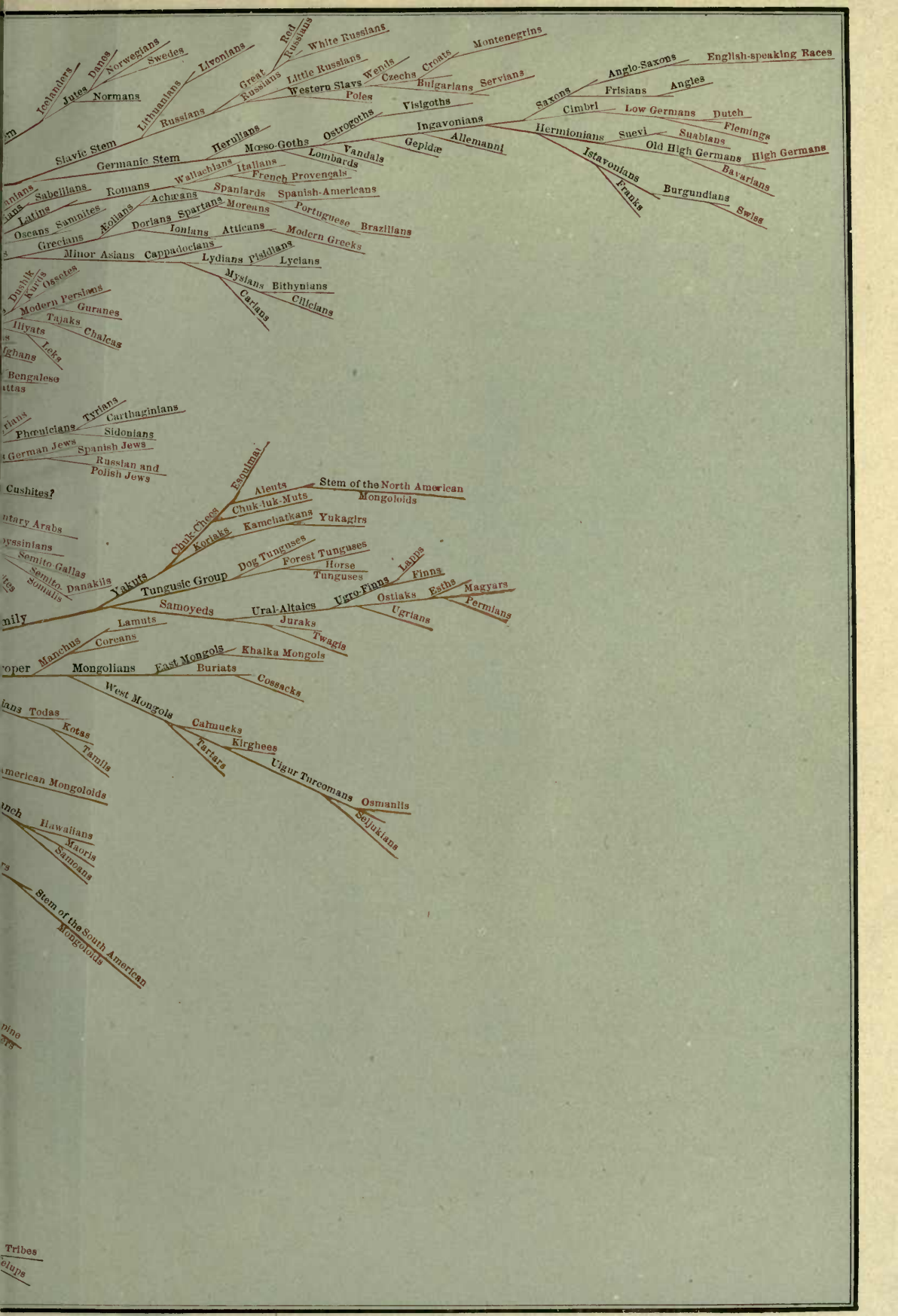
RACE CHART No. 1

SHOWING THE DISTRIBUTION OF MANKIND ON THE HYPOTHESIS OF A COMMON ORIGIN.

Ruddy Races on..... *Red Lines*
Brown Races on..... *Brown Lines*
Black Races on..... *Black Lines*
Names of Existing Races in..... *Red*




Icelanders
Jutes
Danes
Norwegians
Swedes
Normans
Livonians
Lithuanians
Russians
Great Russians
Red Russians
White Russians
Little Russians
Western Slavs
Wends
Czechs
Croats
Montenegrins
Bulgarians
Servians
Poles
Slavic Stem
Germanic Stem
Herulians
Visigoths
Ostrogoths
Mœso-Goths
Vandals
Lombards
Gepidæ
Ingavonians
Allemanni
Saxons
Anglo-Saxons
English-speaking Races
Frisians
Angles
Cimbri
Low Germans
Dutch
Flemings
Hermionians
Suevi
Suablans
Old High Germans
High Germans
Bavarians
Istavonians
Franks
Burgundians
Swiss
Wallachians
Italians
French Provencals
Romans
Spaniards
Spanish-Americans
Latins
Sabellians
Oscans
Sammites
Grecians
Æolians
Achæans
Spartans
Moreans
Portuguese
Brazilians
Dorians
Ionians
Atticans
Modern Greeks
Minor Asians
Cappadocians
Lydians
Pisidians
Lycians
Mysians
Bithynians
Carians
Cilicians
Dunhik
Kurds
Ossetes
Modern Persians
Guranes
Tajaks
Chalcas
Ilityats
Leks
Afghans
Bengalese
Phœnicians
Tyrians
Carthaginians
Sidonians
German Jews
Spanish Jews
Russian and Polish Jews
Cushites?
Esquimaux
Aleuts
Stem of the North American Mongoloids
Chuk-Chees
Chuk-luk-Muts
Koriaks
Kamchatkans
Yukagirs
Yakuts
Tungusic Group
Dog Tunguses
Forest Tunguses
Horse Tunguses
Lapps
Finns
Ugro-Finns
Ostiaks
Esths
Magyars
Permians
Ugrians
Samoyeds
Ural-Altaics
Juraks
Lamuts
Twagis
Manchus
Coreans
Mongolians
East Mongols
Khalka Mongols
Buriats
Cossacks
West Mongols
Calmucks
Kirghees
Tartars
Uigur Turcomans
Osmanlis
Seljukians
Todas
Kotas
Tamils
Hawaiians
Maoris
Samoans
Stem of the South American Mongoloids
Tribes

RACE CHART No. 1.

EXPLANATION.

It is the purpose of this Chart to show THE DISTRIBUTION OF THE RACES OF MANKIND, on the theory that they have all proceeded from *a common source*. That source is indicated by the heavy black line at the left, marked "Original Stock of Mankind." From this original stock several great divisions branch off, the first of which is the stem of the prehistoric Black races; the second, the stem of the prehistoric Brown, or Mongoloid, races: and the third, the stem of the prehistoric Ruddy, or White, races. Each of these stems divides into many branches.

In general, the latitude of the given race is indicated in the Chart as on an ordinary map; that is, those races having the most northernly distribution are above; those in the temperate zones come next, as nearly as practicable; and those in the tropical regions fall in the center or lower part of the Chart.

Wherever the red lines extend, there the White, or Ruddy, races are distributed: wherever the brown lines reach, there the Brown, or Mongoloid, races are found; while the black lines indicate the distribution of the Black races.

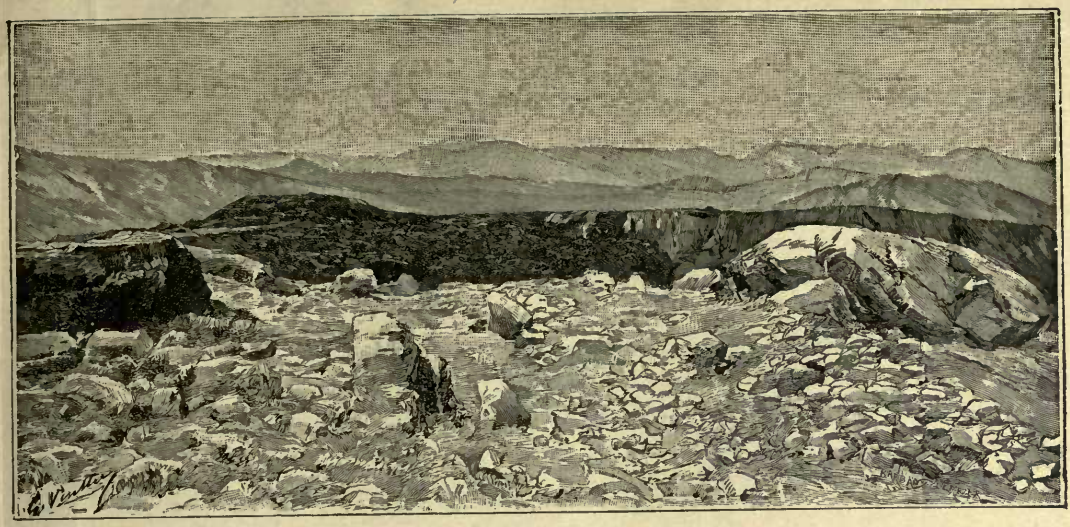
Nearly one-fourth of the Chart at the left indicates the prehistoric, or unknown, period of race distribution. Out of this prehistoric period the various races emerge. There is an Aryan, or Indo-European, family; a Semitic family; a Hamitic family; a Mongoloid family; and sundry Black races, little known to the present day.

In the greater part of the center of the Chart, and to the right, wherever the names of races or stocks are printed in black letters, those races, or stocks, are extinct; that is, they have either ceased to exist, or are represented only in their descendants. Examples of such are the Visigoths, the Carthaginians, the Etruscans, etc.

All the names of races, families, and stocks, printed in red letters, are existing, or living, peoples. These are found, for the most part, distributed to the right at the end of race-stems. Thus we have, as examples of living races, beginning above, the Welsh, the Icelanders, the Red Russians, the Montenegrins, the English-speaking races, the High Germans, the Swiss, the Brazilians, the Esquimaux, the Magyars, the Osmanlis, etc.

The Chart enables the reader, in particular, to trace the race descent of any living variety of mankind. Thus, the English-speaking races are derived (read back from right to left) from Anglo-Saxons, Saxons, Ingavonians, Mœso-Goths, out of the German stem, of the Teuto-Slavic division, of the West Aryan branch, of the Indo-European family, of the prehistoric Ruddy, or White, races.

So, in all the cases of race-history, the Chart is intended to show, at a single survey, all of the leading developments of mankind. Many minor varieties are necessarily omitted; but all of the principal stocks of the human race are here displayed in their proper ethnical and historical development. (For the geographical distribution of the various races, see Race Charts Nos. 2 to 9, inclusive.)



BOOK IV.—DISTRIBUTION OF THE RACES.

CHAPTER XXIII.—CLASSIFICATION OF THE HUMAN SPECIES.

IT has already been remarked that migration constitutes one of the leading facts in the history of the primitive world. Movement was the mood of the first men who possessed the earth. It was by means of tribal and national migrations that mankind were distributed into the various regions where they subsequently established themselves in communities and states. From certain centers the human streams arose and flowed in different directions, bearing afar the fecund waters of future national life.

Nearly all of these movements are hidden under the obscurity that clouds the beginnings of history. The very best penetration of the historian and ethnologist can reach no further than the shadowy confines of the countries and ages in which these primitive motions of the human race took their origin and expended their force. The task of delineating the migrations and dispersions of the early races may well challenge the profoundest inquiry, and the problem must even then be attempted with extreme diffidence and much distrust of the existing resources of knowledge.—It is the purpose in the present book to delineate at least the leading migrations of the early races of man.

Obscurity of the early movements of mankind.

In the nature of the case, the migratory movements of primitive mankind have left only incidental traces in history and tradition. For this reason the evidences of human distribution have to be gathered, for the most part, by indirection out of collateral branches of inquiry. As preparatory to a description of these movements, upon which all future history in some sense depended, it is necessary to frame an adequate analysis of the human family according to those distinc-

Why a classification of the races is necessary.

tions upon which the tribal and national life of one people is discriminated from that of another. It is impossible to speak intelligently of the early migrations of mankind without a division and classification of the human species, to the end that its various parts may be considered in detail and in relation the one with another. Such a classification into different races, families, and stocks is the first task imposed upon the ethnologist, and is a work in every way essential to the understanding of the beginnings of human history.

A METHOD OF MIGRATION.—EASTERN CARAVAN.—Drawn by W. J. Morgan.

The division of the vegetable kingdom by Linnæus, and the arrangement of the animal world into genera and species and varieties by Cuvier, were not more essential to the understanding of those two great departments of nature than is an adequate classification of mankind into races, families, and types essential to a knowledge of ethnic history. Great, therefore, is the embarrassment of the inquirer to find that even to the present day this work of classifying the human race according to its true ethnic distinctions has never been satisfactorily accomplished. The principle according to which the division or divisions are to be made has never been well determined, and the problem at the present day is still to be considered in its original elements.

No adequate method of classifying yet discovered.

It can but be of interest in this connection to present in brief some of the leading methods which have been adopted in the attempted classification of the human race. The most learned of the ancients were profoundly ignorant of the affinities of the different families of mankind, and found no pleasure in tracing such relationships. On the contrary, the mental tone of antiquity was against the notion of the kinship and common descent of the nations. Each people disseminated the belief in its own priority and preëminence, and discarded as much as possible those democratic traditions which seemed to reduce themselves to a common level with barbarians and heathen. Not until long after the eclipse

The ancients believed in the diversity of the races.

of the classical ages, not until the barbarism of mediæval Europe had at length been pushed back by the revival of learning, did men attempt in a more thoughtful and philanthropic spirit to investigate the beginnings of human development and the affinities of the different peoples who inhabited the earth.

Scriptural opinions conduced to a belief in unity

At the time of this reënlightenment of the European nations the Roman Catholic Church was dominant throughout the West. This great organization was based upon the Scriptures of the Old and New Testaments, and from these ancient books were derived, either directly or indirectly, the greater part of the learning of the Middle Ages. It came to pass, therefore, that the first rational views with regard to mankind considered as a race and the dispersion and affinity of the nations were derived from scriptural sources. It was from this origin that the prevalent opinions of several centuries were deduced, and it will, therefore, be appropriate in this connection to present, first of all, the long prevalent beliefs which were derived from the Hebrew Scriptures.

I. THE BIBLICAL ETHNOLOGY.—In the tenth chapter of Genesis we have an account of the departures and migrations of primitive mankind. The narrative begins with the descendants of Noah, the survivors of a deluge. His three sons become the progenitors of the three dominant races which go forth to people the world. The progenies of Shem, Ham, and Japheth, according to their families and tribes, are dispersed in the various countries of Western Asia, Northern Africa, and Eastern Europe.

The biblical ethnology; distribution of Shem and Ham.

In general, this account assigns to Shem and his family the Elamites, the Assyrians, "Arphaxad and Lud and Aram." According to this scheme Eber is the grandson or descendant of Arphaxad, from which we are able to see emerging dimly at least three historical peoples —the Elamites, the Assyrians, and the Hebrews. Among the sons of Ham are mentioned Cush, and Mizraim, and Phut, and Canaan, with their respective descendants. To Cush is assigned Nimrod and his historical progeny. Mizraim is doubtless the original tribal name of the Egyptians, while Canaan, whose sons are Sidon and Heth, is clearly the ancestor

CUSHITE TYPE—SHEIK OF CHAMARS.
Drawn by H. Thiriat, from a photograph by Mougal.

of the Canaanitish races of subsequent times.

The generations of Japheth are said to be Gomer and Magog and Madai and Javan and Tubal and Meshech and Tiras. To each of these is given a family of sons and descendants, and they are said to have distributed themselves among the "isles of the gentiles," "every one after his tongue, after their families, in their nations." In the case of Japheth, also, we are able to detect the

Japheth disseminated into the "isles of the gentiles."

historical beginning of nations, especially in the case of his son Madai, who is thought to have given his name to the ancient Medes. Besides what is here presented in outline, a place must be left in the ethnic scheme for the direct descendants of Noah, who is said to have lived for more than a century after the Deluge, and to have begotten sons and daughters.

Such, in a word, is the biblical scheme which the first ethnologists of modern Europe employed to account for the dispersion of the human race in the earth. It gives a fairly adequate outline of the peopling of Western and Southwestern Asia and of the countries around the eastern parts of the Mediterranean. We may even allow for the dissemination of the descendants of Noah eastward from Armenia, and thus cover a still wider area of the habitable globe. A summary, then, of the biblical schedule of the primitive peoples will give the following results:

Summary of the biblical schedule of primitive peoples.

1. *Japhethites*, with seven tribal divisions, migratory in habit, journeying to the west, and peopling the gentile lands beyond the limits of Asia.

2. *Hamites*, with four family, or tribal, divisions, three of which, at any rate, may be located, respectively, in Cush and Canaan and Egypt.

3. *Semites*, with five tribal branches, of which the Assyrians, the Elamites, the people of ancient Aram, called Aramæans, and the Hebrews, became, in their respective countries, the leading representatives.

4. *Noachites proper*, of the divisions of which the biblical narrative has given us no outline, but concerning which a rational inference of eastern migration may be drawn.

The account in Genesis indicates clearly a disposition of the Noachite families to part company and disperse into various regions. The differentiation of tribes is clearly announced as the fundamental fact in the first epoch after the traditional destruction of the Old World by water. There is thus a certain conformity in the account given in Genesis to the actual facts which we discover on the furtherest horizon of the primeval world. The jostling and division of tribes under the impulse of the migratory instinct is a fact which presents itself with equal clearness to the historian, the ethnologist, and the antiquary; and the correspondence of the primitive Hebrew narrative with this manifest tendency among the primeval families of men gives force and credibility and corroboration to both branches of the inquiry.

Value of the ethnic scheme outlined in Genesis.

Concerning the above biblical scheme of the dispersion of mankind in the primitive world, it may be fairly urged that it is hardly as ample as the facts to which it is applied. Within the limits of the peoples and countries referred to in the tenth chapter of Genesis, it appears to cover approximately the facts as they have been revealed by other methods of investigation, but it leaves many parts of the world unprovided with the populations which they are known to have possessed even before the dawn of authentic history.

Many attempts have been made to strain and exaggerate the biblical ethnology, and to compel it, by attenuation and hypothesis, to cover all parts of the habitable globe. These efforts appear to have been inspired by a zeal beyond knowledge, and to have had little success in application, except in the minds of those who had been already fixed in belief by

Points of inapplicability in the Hebrew classification.

preconceived opinions. This is to say that the attempt to derive such races as the primitive inhabitants of Western Europe—the cave men, the people of the shell mounds, and the tumuli—from some branch of the Semites, the Japhethites, or the Hamites, as those families are outlined in the tenth chapter of Genesis, would have no ground on which to rest—at least in the present state of human knowledge. In like manner, the attempted derivation of the North American Indians, of the Aztecs, of the South Pacific Islanders, of the Fuegians, of the native Australians, or of the Hottentots, from the Hebrew plan of dispersion would be equally without avail, at least with such data as are now in the possession of scholars.

The scheme of family and tribal division given in the tenth chapter of Genesis appears to the historian and ethnologist to be satisfactory *within the narrow limits of the races and countries to which it applies;* but it also appears that there are many parts of the globe which are known to have been inhabited at a time even more remote than current chronology assigns to the rise of the Noachite nations for which the plan of dispersion presented above seems to provide no likelihood or even possibility of inhabitants. How far the Hebrew scheme of dispersion and development from a Noachite origin through its three leading branches of Hamites, Semites, and Japhethites conforms to other ethnological outlines derived from different data and by means of different methods of investigation, remains to be elucidated in the following pages.

The scheme satisfactory within narrow limits.

II. HISTORICAL ETHNOLOGY.—With the progress of historical investigation during the last three or four centuries so much information has been gathered relative to the first races of men and their movements across the ancient landscape, that a system of ethnic classification has been advanced from a purely historical basis. It was known, or suspected, by the Romans and Greeks two thousand years ago that they were related in their descent. Later on it became known that such peoples as the Medes and Persians were of the same race-origin with the Macedonians and

Origin and development of historical ethnology.

INDO-EUROPEAN TYPE—THE SULTAN MACOUD MIRZA.
Drawn by H. Thiriat, from a photograph by Madame Dieulafoy.

the Hellenes. In still more recent times it was discovered that the Teutonic races had an ethnic affinity with the Græco-Italic family and with the Celts of Western Europe. Still more recently it became known that the Hindu races were descended, in all probability, from a common origin with the Greeks, the Romans, and the Teutonic branches of mankind. A still higher view of the whole question has led to the belief of the ultimate affinity of the Semitic nations with the great peoples mentioned above, and

Glimpses of a wide application of this method.

SEMITIC TYPE—THE ARAB BENI LAAM.
Drawn by H. Thiriat, from a photograph by Madame Dieulafoy.

of the Hamites with all the rest. As the historical horizon has widened and the vision of the observer has become clearer with the increase of knowledge, the true relations of the various families of men have been discovered to the extent of warranting a classification on the basis of actual history; and many attempts have been made to produce on this basis a scheme of ethnic dispersion as broad and comprehensive as the far-reaching facts which it is intended to explain.

As a result of this method, several races of men have been distinguished from each other and classified according to their ethnic descent and affinities.

1. *The Indo-European Race.*—It has been definitely ascertained that two of the great Asiatic families and at least four of the prevalent peoples of Europe have had a common descent from a common ancient origin. To this community of nations the name Indo-European, or Indo-Germanic, has been applied by historical writers. The term signifies the two extremes in place and time of the national dispersion from the common origin referred to. It signifies that an Indic branch of the human family, including with this term the Iranic, or Persic, division of mankind, has been derived primarily from the same fountain with the Græco-Italic race and with the Celtic and Teutonic divisions of mankind in Europe. From the common fountain, two Asiatic streams flowing to the south and the east are known to have arisen in common with the four westward flowing streams that were destined to bear into Europe and through all the west the primitive waters of Hellenic, Italic, Teutonic, and Celtic nationality. The term Indo-European is thus devised to cover the wide extremes of human development which span the world from the valley of the Indus to California.

Meaning and scope of the term "Indo-European race."

2. *The Semitic Race.*—Under this head the historians have developed a classification very nearly analogous to that embraced under the same classification in biblical ethnology. There is, historically speaking, some indistinctness on the further borders of Semitic development. Whether, for instance, the ancient Chaldees were to be included under this designation may be regarded as doubtful. It is sufficient to note that the He-

Races included under the definition of Semitic.

brew race, in its several divisions, ancient and modern, is included under the Semitic division of mankind, and constitutes, indeed, its most striking representatives. So also the more recent Arabs are included as a cognate branch of the same great family; and the ancient Aramæans prevalent in Syria, Mesopotamia, and other western districts of Asia must in like manner be classified with the Semitic division of mankind. The reader will not fail to observe that history, considered as a science, and the scriptural account of the dispersion of the human race are very nearly in accord as it respects the divisions, migrations, and historical development of the Semitic family of men.

3. *The Hamitic Race.*—This division of mankind is known to history chiefly by its greatest representatives, the ancient Egyptians. As planters of the strongest and most enduring civilization of remote antiquity, these people could but make a strong impression on the earliest historical developments of the world. Cognate with the Egyptian race were several other branches of Hamites, but nearly all of them are obscured with doubt as to their origin and classification. Such are the old Chaldæans, who planted their empire on the Lower Euphrates as much as two thousand years before our era; and such are the Joktanian Arabs of the south, bordering on the ocean, and such are several of the Canaanitish nations, with whom the greater historical peoples came into contact from the seventh to the third century B. C. Many historians have regarded the Phœnicians, the Sidonians, and the Carthaginians as of Hamitic descent, and it is highly probable that some of these peoples were at least composite in their ethnic origin. As a general fact, it appears that the Semitic and Hamitic peoples of antiquity were less completely separated from each other's influence, less perfectly differentiated into diverse types of race development, than any other two branches of the primitive family of men.

Who the Hamites were; doubts as to certain races.

HAMITIC TYPE—THE EGYPTIAN SAÏS.
Drawn by A. de Bar.

4. *The Altaian Races.*—The great nomadic peoples having the highlands of

the Altais as their original habitat have been designated by many terms, and there is yet much confusion in their attempted classification. Even the major divisions of these races are not well made out. One of the broadest divisions is the Tartar family, spreading to the north and east over a great part of Asia. It is still in dispute whether

The Altaian races; dissemination of the Tartars.

ALTAIAN TYPE—OLD TARANTCHI.
Drawn by E. Ronjat, from a photograph.

the Tartars and Mongolians should be considered as primary ethnic divisions of mankind, or whether the Mongolian branch of the south has been deflected from the Tartar group of the north. As we shall presently see, this great assemblage of semicivilized races, nomadic over the vast steppes of the north and in a low grade of development in the south, is defined by the term Turanian in the linguistic division of men. But for historical purposes the whole group may best be classified and named from its geographical center on the northern slopes of the Altais. The White Tartars, or Turcomans, as the westernmost division of the great Altaian group, have, by their aggressions in Asia Minor, Syria, and Eastern Europe, brought the family of nations to which they belong into historical relationship with the Indo-European race, and have thus preserved unto the present time at least the reminiscence of the prowess for which they were characterized in the fifteenth and sixteenth centuries.

5. *Western Aborigines.*— Besides the greater peoples with whom history has had to deal in Western Asia and Europe, the progress of nations westward has brought them into contact with new varieties of the human family, unknown in ancient times. The limited geographical knowledge of the ancient peoples shut them out from an acquaintance with the widely spread barbarian races occupying the New World, the continent of Australia, and the islands of the sea. It is not meant that the inhabitants of the vast regions here referred to are of a common ethnic descent. On the contrary, as we shall see hereafter, many original stocks of mankind are represented in the existing savagery of the world. But for historical purposes the aborigines of the West and of the ocean lands of the South and west may, for convenience, be grouped together and considered as an unclassified mass of peoples, in varying stages of evolution.

Aboriginal races of the western hemisphere.

It will be remembered that what is here attempted is merely to indicate such results in the way of classification as are afforded from a purely historical point of view; and for this purpose all

the outlying barbarous peoples that have been revealed since the beginning of geographical discovery at the close of the fifteenth century may be grouped as one, and considered as a single fact in the analysis of the human race. If, then, we collect the results derivable from this historical view of the dispersion of mankind, we shall find the foregoing five groups of peoples, the first three of which, the Indo-European, the Semitic, and the Hamitic branches, are tolerably clearly defined and separated by ethnic lines, while the remaining two, the Altaian group of nations and the Western aborigines, are banked together rather for convenience of consideration than by exact principles of classification.

Results of the method; imperfections in the scheme.

III. LINGUISTIC ETHNOLOGY.—Within the present century the study of language has thrown new light on all the disputed questions relative to the dispersion and race developments of mankind. The scientific investigation of speech has made clear many vexed questions in the primitive history of men that to all seeming could have found no other solution. The general effect has been to confirm and establish many of the views already received from tradition and historical inquiry, and to disprove and render untenable many other opinions concerning the movements and affinities of the early races. Much that was conjectural has become known as fact. Theories have been demonstrated or destroyed, and new views of the extent, variety, and true character of tribal and national evolution have been projected. In some departments of inquiry the new knowledge has amounted to a revolution. On the whole, it is almost impossible to overestimate the value of linguistic science in the exposition of all questions relative to the prehistoric conditions and movements of mankind.

In what manner language has become a basis of classification.

If we take up the results of this study of human speech as it respects the ethnic classification of the race, we find a certain general parallelism to what has been presented above as proceeding from biblical and historical investigation. To begin with, the science of

WEST ARYAN TYPE—ALCIBIADES.

language declares with emphasis and demonstrates the existence of—

1. *The Aryan Race.*—This term, as elucidated in the preceding book, relates primarily to a primitive nobility claimed and maintained by the peoples called Aryan, which nobility was based upon the agricultural life as distinguished from nomadic and pastoral pursuits. It is not needed to illustrate further in this connection the meaning and application of the term. It suffices to note the fact

The Aryan race established by linguistic processes.

that the study of language has defined and proved beyond a doubt the fundamental affinity and kinship of the Aryan folk of Asia—that is, the great Hindu family of Aryans in the valleys of India and the Iranian, or Persic, division of mankind—with the Græco-Italic race and the Teutones and Celts of Europe.

The community of the original speech of all these peoples, spreading in its widest development from the base of the Himalayas westward over the table-lands of Iran, through the southern peninsulas and the transmontane forests of Europe to the Atlantic, and through the New World to the Pacific coast, has been established by proofs irrefragable as those which determine the truths of geology or the laws of the physical world. The course of the tribal movements by which from the countries east of the Caspian these great and progressive streams of human life pursued their way to their destination can be traced by the linguistic phenomena which they left in their track, and the elimination of the great family of men to which scholars have in recent times given the name Aryan from the remaining races has been completely effected.

Race movements traceable by phenomena of language.

It can but be of interest at this point to state the linguistic facts upon which the classification of mankind has been attempted. It is found that certain peoples, like the Aryan family above defined, speak dialects of a common language. In general, they have a vocabulary and a grammar in common. When we find two peoples living in different and distant parts of the earth naming the objects of sense and reflection with the same words, and combining those words in sentences under the same laws of grammatical and logical structure, we are compelled to conclude that the two languages have had a common origin somewhere in the past; and if the languages have thus arisen from a common source, the two peoples who spoke them had also an original tribal identity. This is exactly the case with the great nations called Aryan. The six branches of this vast family of mankind, namely, the Indic, the Iranic, the Hellenic, the Italic, the Teutonic (including the Slavonic), and the Celtic, are not only identified by the laws of history, but also by the laws of speech. The Sanskrit, spoken in ancient India, the Persic dialects of the plateau of Iran, the different varieties of Greek peculiar to Hellas and the Ægean islands, the Latin tongue of the West, the various Teutonic languages, and the Celtic, with its two or three derivatives, have all a fundamental linguistic identity. Their vocabulary as it respects the primary objects of sense and the common actions of life is virtually the same in all.

What facts in language warrant ethnical conclusions.

More striking still are the fundamental peculiarities of their respective grammars. The great feature of all these tongues is *inflection*. The variations of thought as, for instance, number, gender, and case in nouns, mood and tense in verbs, comparison in adjectives and adverbs, are indicated by terminational changes in the words of the language, and these changes obey the same laws and present the same phenomena in all the speeches above referred to. Only the student of language can fully appreciate the striking similarities which present themselves in all branches of the Indo-European, or Aryan, tongues. It is as though we should study a single language with dialectical variations. And so indeed it is. The original speech of all these peo-

Inflection the prevailing feature of Aryan speech.

ples was one. Somewhere in the past and somewhere on the surface of the earth, before the era of tribal migration, a family of men had, by reason and experience, developed a language of the inflectional variety, had given names to the objects of nature and the concepts of the mind, had defined by certain words the actions and thoughts peculiar to their volitions and imaginations.

The general result of this evolution was the production of a great typical speech, which was spoken by all the members of the tribe in its ancestral home. From this region the migrations began, and each band of emigrants carried with them the ancestral speech. As they entered into new relations with nature and new experiences in life, passing through belts of different climate, encountering new landscapes and familiarizing themselves with new conditions and environments, their tongues began to modify the original language, and to adapt it to the changing panorama of nature and the varying concepts of the mind. Generations went by. Different regions of the earth were reached. National developments ensued. But still the fundamental identity of the speech of all these peoples was maintained. So that in India, in Persia, in Macedonia and Greece, in Italy, in the forests of Northern Europe, and in the outlying portions of Spain and Gaul and Britain, the scholar of after times discovers the broken, but clearly identical, fragments of a common language once spoken by the ancestors of all these peoples. Thus it is that the study of language has furnished one of the surest criteria by which to determine the ethnic classification of mankind.

How languages are modified by environment.

2. *The Semitic Race.*—Following this same clue, we discover by means of language another family of men, to which is given the name of Semitic. Here we notice the recurrence of the same term which was given us in the biblical ethnology and repeated in the historical division of the races. The linguistic inquirer finds in the East a group of nations speaking languages totally different in structure and vocabulary from the Aryan tongues above defined. The speech of the Hebrews, the old Aramæans, and the Arabs is as distinct in its essential character from Sanskrit and Greek and Latin as though it belonged to a wholly different class of phenomena. The words of the Semitic languages, instead of being of all lengths as to syllables and letters, consisted fundamentally of triliteral symbols. Every word is essentially a word of three letters and three only. These constitute the skeleton, so to speak, of the vocal symbol, and around this skeleton the vocalic elements are arranged.

Semitic races may be classified by means of their languages.

Inflection is almost unknown to the Semitic languages. The grammar of these tongues is constructed upon a totally different principle from that of the Aryan languages. Even the superficial student of human speech must be struck and astonished from the very first with the essential difference and contrast between the Semitic method of expressing thought and the method of the Aryan peoples. It is from this distinction that the linguistic inquirer has constructed the classification of the Semitic races. The Hebrews, the Aramæans, and the Arabs, with their derivatives in ancient and modern times, are grouped by themselves, and are as certainly defined by means of the languages which they speak or have spoken as they are clearly divided from the other nations in historic development.

Contrast between Semitic and Aryan methods of speech.

3. *The Turanian Races.*—The progress of linguistic science has revealed another great group of languages, differing entirely in structural character from the two varieties above described. It is found that in general the languages of the nomadic nations of Northern Asia are *monosyllabic*. They consisted originally of words of a single syllable, and are *never inflected*. In order, however, to express the necessary inflection of ideas and to effect the construction of the sentence, they adopted what is called the agglutinative method of combination. That is, several monosyllables are put in juxtaposition to express the complex or compound notion which in the Aryan languages would be denoted by means of inflectional terminations. This feature of combining monosyllables in long, compound expressions, partly resembling words and partly sentences, is common to the languages of nearly all the nomadic nations of the earth.

Peculiarities of the so-called Turanian languages.

TURANIAN TYPE—KIRGHEEZ FALCONER.
Drawn by Delort, from a photograph and description.

It is believed by scholars that such languages have not yet reached the inflectional stage of development, and that, in obedience to natural laws, they will ultimately pass into a form of structure similar to that of the Aryan vocabulary and grammar. No example of such transmutation, however, has been noted in any quarter of the world. The agglutinative languages hold fast to their original character, and the peoples who speak them prefer to retain their tedious, periphrastic methods of expression to the adoption of the briefer and more elegant inflectional forms of speech. Based on these agglutinative dialects, the ethnic classification of races has been extended to

Features of agglutinative tongues; meaning of "tura."

include the great group called Turanian. The word is derived from *tura*, "a horseman," and has respect to the national habit of life peculiar to the semibarbarous races of Northern Asia. In general, the Turanian family, as determined by the peculiarities of language, conforms with tolerable identity to the Altaian group of nations as determined by historical relationships.

4. *The Ganowanian Races.*—In addition to the three major divisions of mankind thus determined by the evidence of language, a fourth division has been suggested to include the barbarian races of the New World; and for this branch of mankind the name Ganowanian has been proposed by Professor Lewis H. Morgan, of the United States. In the Seneca-Iroquois dialects the word *gano-wano* signifies "bow-and-arrow," and Professor Morgan has seized upon this expression as indicating the most universal characteristic of the Indian races. They are, and have always been, the wearers of the bow. Just as the root *ar* has furnished to Max Müller and other European scholars the hint for the ethnic name Aryan, meaning the races of the plow, just as *tura*, meaning a horseman,

GANOWANIAN TYPES—UCAYLI INDIANS.
Drawn by P. Fritel.

has furnished the root of the word Turanian, descriptive of the nomadic races of Asia, so the word Ganowanian may properly be employed to designate the races of the bow and arrow. Linguistically considered, the various tongues of the Indian family of men belong by analogy to the same group with the Turanian languages of Asia. They have the same peculiarities. They are monosyllabic, and all complex and compound ideas are expressed by the agglutinative process; that is, the mere juxtaposition of one monosyllable with another, until the mind of the speaker is satisfied with the modification.

The Ganowanian, or bow-and-arrow, races.

SEA NEGRO TYPES—NATIVES OF DOREY.
Drawn by P. Sellier, after a sketch of Dumont d'Urville.

IV. GEOGRAPHICAL ETHNOLOGY.—We have thus considered three of the general methods which have been adopted for classifying the human race into species and varieties. Still another plan has been proposed by a certain class of writers with a view to the ethnic division of mankind. This we will now consider as the fourth attempt to group the different families of men according to their origin and race descent. It has appeared more feasible to many inquirers to use geography as the basis of a classification rather than alleged affinities of blood or actual identities of language. It has been thought that for practical results the arrangement of the human race according to its continental distribution and its local developments would be of greater value than the somewhat theoretical analysis of mankind according to linguistic distinctions. The result has been a more elaborate but less valuable classification than by any of the other methods. The plan in question begins with a hypothetical center for the human race, located in the Indian ocean, west of Hindustan. From this supposed origin of mankind streams of ethnic descent are carried shorewards from Lemuria until, touching the various continents, they are deflected and distributed into all parts of the earth. According to this scheme we have the following results:

General theory of geographical ethnology.

1. The *Papuans*, with their derivative

families of Negritos, Papuans proper, Melanese, and Tasmanians. These peoples, as their names indicate, are distributed in Malacca, the Philippine islands, Papua, Melanesia, and Tasmania.

Summary of results by the geographical method.

2. The *Hottentots*, with their two leading branches, the Hottentots proper and the Bushmen, both inhabiting Capeland.

3. The *Kaffirs*, with their three divisions, the Zulu-Kaffirs, the Bechuanas, and the Congo Kaffirs, inhabiting respectively the eastern, the central, and the western districts of South Africa.

4. The *Negroes*, with their four principal divisions of Tibbu Negroes, Sudan Negroes, Senegambians, and Nigritians, inhabiting the regions indicated by their respective names.

5. The *Australians*, with the two geographical branches of North Australians and South Australians.

6. The *Malayans*, with their three divisions of Sundanese, Polynesians, and Madagascans, the first two inhabiting the Sunda archipelago and the Pacific islands, and the latter the island of Madagascar.

7. The *Mongolians*, with their three varieties of Indo-Chinese, Coreo-Japanese, Altaians, and Uralians, the first belonging to Thibet and China, the second to Corea and Japan, the third to Central and Northern Asia, and the fourth to Northwestern Asia and Hungary in Europe.

8. The *Arctics*, with the two principal divisions of Hyperboreans and Esquimaux, belonging respectively to Northeastern Asia and Northeastern America.

9. The *Americans*, with four leading divisions, the North Americans (Indians), Central Americans, South Americans, and Patagonians, distributed according to their several ethnic names.

10. The *Dravidians*, with two race developments, the Deccanese of India and the Singalese of Ceylon.

11. The *Nubians*, with their three varieties, the Shangallas and Dongolese of Nubia, and the Fulahs of Fulah.

12. The *Mediterraneans*, divided according to this scheme into Caucasians, Basques, Semites, and Indo-Europeans; the first of these four being named from the range of the Caucasus, the second belonging to the northeastern portion of Spain, the third being limited to Eastern Europe and portions of Northern Africa, and the Indo-European branch being nearly coïncident with the European division of the Aryan race as defined in the linguistic scheme above.

ESQUIMAU TYPES.

We thus have, according to the geographical scheme, no fewer than twelve major divisions of human kind, represented by thirty-seven different races,

many of which are in turn divided and subdivided into various peoples and tribes, according to their localities, languages, and ethnic peculiarities.

On the whole, this method of classification according to the geographical basis is less satisfactory in its results than any of the others presented. It assumes that tribes of a given stock will, as a rule, migrate in the same direction and occupy the same territories. It is based upon the hypothesis that an aggregation of peoples in any given part of the world is *of itself* a proof of a common race descent. On the contrary, it is well known that in many parts of the world races and tribes of men, as wide apart as the poles in their ethnic affinities, are geographically associated. A classification like the above, which places so old and radical a stock as that of the Semites in the same group with the Indo-European races, lacks every element of accuracy, and tends to perpetuate the worst vices of the old system of ethnology. None the less, such a division of mankind as that presented in the geographical scheme above has its value when set in comparison and parallelism with other and more rational ethnic classifications.

Unsatisfactory character of geographical classification.

NUBIAN BOY—TYPE.—Drawn by Ishmael Gentz.

V. SCIENTIFIC ETHNOLOGY.—In the schemes of race descent thus far presented the linguistic plan of division most nearly approaches a scientific basis. There are in the same, however, certain unscientific conditions that must

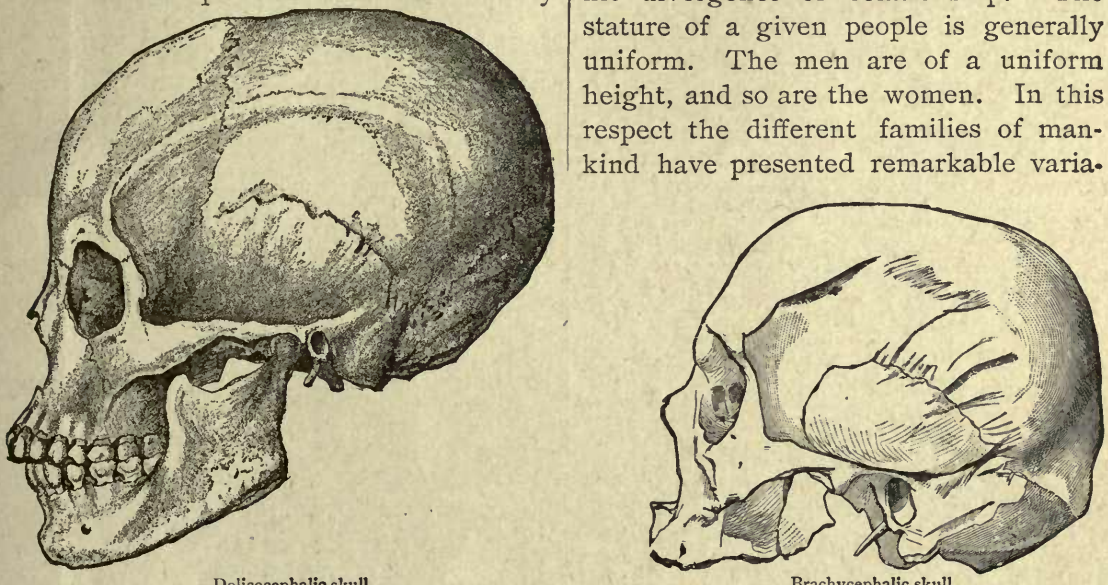
Elements of uncertainty in linguistic method of race division.

be eliminated before the division of the human race by language *only* could be accepted as a finality. One of these conditions is the patent fact that a people of a given ethnic origin may, in the vicissitudes of history, adopt a speech other than its own, and thus be thrown in a classification very different from that to which it really belongs.

Several instances might be cited in which this phenomenon has actually presented itself. At times the conquering race absorbs the language of the conquered people, and, in such a case, subsequent investigation would be put at fault if the linguistic affinity of the people were accepted as the sole criterion of its race relationship. The conspicuous modern example of the Normans, who abandoned their own Teutonic speech and adopted French as their vernacular, carrying the same with them into England, and effecting in the English language a permanent modification by the infusion therein of linguistic elements which they had borrowed from another people, is sufficiently well known, and completely establishes the possibility and probability of error in classifying by means of language only.

But there are other means of a more strictly scientific character which may be employed in classifying the divisions of the human race. Differences or identities in anatomical structure, persistently transmitted from generation to generation, constitute a valid evidence of ethnic divergence or relationship. The stature of a given people is generally uniform. The men are of a uniform height, and so are the women. In this respect the different families of mankind have presented remarkable variations. Some approximate the stature of giants, and others of pygmies. The proportions of the skeletons likewise constitute a fair basis of distinction between people of one race and those of another. The character of the hands and the feet, the length and proportion of the arm bones and the legs, the particular figure of the chest, and especially the facial angle, are peculiarities which may well be employed in a scientific way in distinguishing people of one race descent from those of another.

Possibility of classifying on variations in form.



Dolicocephalic skull. Brachycephalic skull.

CRANIAL CONFIGURATION, SHOWING VARIATIONS IN HUMAN FORM.

More especially the figure and capacity of the skull are typical, each family of men having a cranial configuration and development peculiar to itself.

Careful investigations have shown the limits of these variations, and have determined those features of the skull and brain which are distinctive of several races of men. The hair of the head, likewise, has furnished a distinguishing mark in different peoples. It is found that the hair in different races ranges all the way from a woolly fiber, presenting a triangular section and having its vital channel on the exterior surface, to the straight, tubular filament which constitutes the head covering of some of the superior races. Between these extremes are all varieties of capillary formation. These varieties are found to

Crania and skulls as a means of determining race.

PAPUAN TYPE, SHOWING CRISP HAIR.

be persistent from generation to generation and from century to century. Specimens of human hair recovered from the granite crypts of Egypt, where they were laid more than two thousand years before our era, exhibit the same peculiarities and diversities of structure as are found on the heads of living races. Such specific differences in the external covering of the skull may well be used in a scientific way as a mark or criterion by which the different families of mankind may be discriminated the one from the other.

AMERICAN INDIAN TYPE, SHOWING STRAIGHT HAIR. Drawn by Riou.

The human skin also has its particular features and peculiarities, unlike in the different types of mankind. This is said more particularly of the *color*. Of all the features with respect to which men differ in physiological constitution the pigmentary character of the cuticle is perhaps the most marked, invariable, and persistent. This fact has been selected by many ethnographers as the best consideration from which to frame a scheme of division for the human species. It is found that the different races have different colored skins; that a given race is sufficiently uniform in its hue; that the color once determined, is persistent, reproducing itself from age to age, and being recognizable even after thousands of years as belonging to a certain species. Why not, therefore, adopt the color of the body as the most marked

Color of the skin a true test of ethnic affinity.

and invariable characteristic by which to distinguish the ethnic classification of the various peoples?

Such a principle of division appears to be in every wise scientific. The color of the skin is a physical fact in nature, and its invariability in a given species assures the constancy of the fact and furnishes a guarantee against error. No anomalous departures from the given standard of color need be expected except in the case of individuals, and such exceptions would in no wise disturb the regularity of the law. Moreover, the other sources of information, the other bases of division of the human family, may well be used as auxiliary to the truly scientific classification of mankind by means of color. All that is known historically of the different races, all that is known of the various branches of the human family as determined by means of the languages which they speak, may be brought to bear upon the problem to rectify and amend whatever may be suspected of error in the classification by means of color.

Scientific classification may be made from color.

Such a method of division has been many times attempted by scholars, but until recently the results have been variable and uncertain. The reason of this is found in the imperfect observation which has first been given to the question. What are the different colors presented on the covering of the bodies of men? What primary or secondary hues are really characteristic of the human skin in different races and countries? Error in deciding these questions has been at the bottom of all diversity in results.

Sources of former error in this method of classifying.

NIGRITIAN TYPES, SHOWING WOOLLY HAIR.
Drawn by Madame Paule Crampel.

It appears strange to the thoughtful inquirer of the present day that so little accuracy has been displayed by those who have attempted to note and describe the different natural colors of the human skin. It will readily be allowed that an examination of the whole race now occupying the earth will discover nearly all colors and shades of color, from one extreme of the spectrum to another; but a very casual examination will show that these various tints are reducible to a few, and these to

still fewer primary pigmentary distinctions.

The great error made by those ethnographers who have attempted to use color of the skin as a basis of classification has been in allowing too many distinctions of tint. Inability on their part to generalize the facts, and to reduce the different hues to a few radical distinctions, has been the fruitful source of all inaccuracy and confusion. The first classifications attempted on this basis of color resulted in multiplying rather than in simplifying the classification of the human race. According to these first efforts there were white men, yellow men, olive-colored men, red men, orange-colored men, copper-colored men, brown men, black men, and many other slighter distinctions which tended to confuse rather than to establish a scientific division. All this turned upon inaccuracy of perception. It is the feature of modern inquiry that the sense-perception with which it begins has become constantly more accurate and penetrating in recent times. It is now clearly perceived that there are by no means so many fundamental colors to be recognized as the distinguishing characteristics of the different races. On the contrary, there are but few. Without passing through all stages of the inquiry, it is sufficient to say that the very best scrutiny of the actual facts shows that there are only *three primary colors peculiar to the human body;* and that these colors are ruddy, black, and brown. From these fundamental and characteristic tints of the human skin all the other varieties are easily derived, and to them all minor distinctions are readily referred.

Only three primary colors of the human skin.

ENGLISH TYPE (MRS. SIDDONS), SHOWING WAVY HAIR.

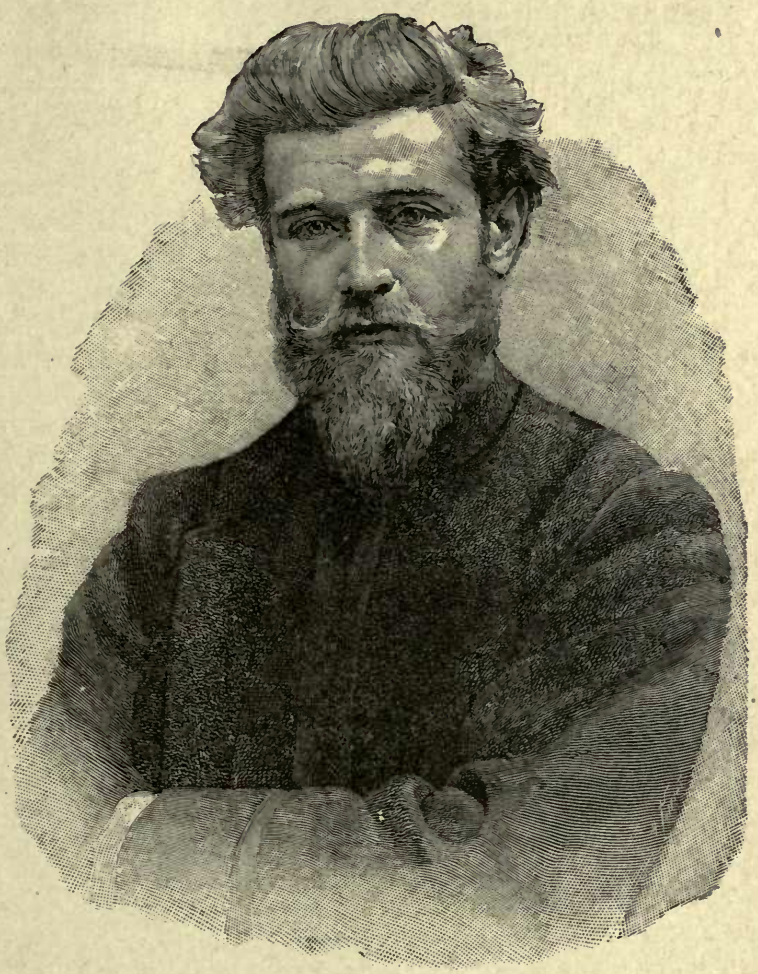
What, then, is the true nature of these three fundamental colors peculiar to the races of mankind? It will be noted that the term *white* is rejected. This is done for the sufficient reason that there are not now and never were any tribes of people on the earth to whom the term white could properly be applied. The fairest-skinned specimens of the human race are very far from white. He who has

The term ruddy substituted for white in this treatise.

not himself looked candidly and carefully at the fact here referred to must needs be surprised to note how great the error is in describing the color of any people as white. The races that have been recognized as white are in reality *ruddy* in color, and approach much more nearly to the standard of red than the Indian peoples, who have been erroneously defined as red men.

The so-called Caucasians, for instance, who perhaps present the skin in its fairest tint, are truly a ruddy people. The peculiarity of the skin is its transparency and the consequent revelation of the blood in the capillaries. The red tinge of the blood is thus discernible through the cuticle, and the flush of color, slighter or more emphatic, is always ruddy in its character. The peoples having this quality of skin are the *blushing* races. With every varying degree of excitement the blood appears or recedes in the skin at the surface, giving a deeper or paler tinge to the body. But under no conditions can the skin be said to be white. The fairest infant ever born into the world, even when bloodless and cold in death, is so far from being white that a really white object placed alongside of the skin furnishes a contrast so striking as at once and forever to disabuse the judgment of the beholder. The term white, therefore, as one of the definitive epithets descriptive of the color of the human race, must be rejected, and its place be taken with the more accurate term ruddy. We thus have in a scientific classification of mankind based on the distinction of color, first of all:

No races may be properly defined as white.



THE RUDDY TYPE—PAUL CRAMPEL.
Drawn by H. Thiriat, from a photograph.

I. THE RUDDY RACES.—It is found when this distinction of color is applied to the great facts under consideration that the larger part of *the historical nations* of the earth come under the classification of ruddy. The great races who first

redeemed the world from barbarism were of this color. It is quite certain that those strong and heroic peoples who appear in the remote horizon of the primitive world were ruddy in their complexions. Speaking from a biblical point of view, all three of the Noachite races, with their several divisions, had complexions of this hue. This is true alike of Hamites, Semites, and Japhethites. The long prevalent notion that the Hamites were a black race, corresponding roughly to what we call African, in modern history, is utterly untenable. They had, on the contrary, the same general complexion—somewhat intensified by the scorching sun of the climates in which they were for the most part developed—with the cognate races of Shem and Japheth. Or, if we speak from the historical point of view, we shall find the same indications of the fundamental identity in color of the early races who developed civilization in the earth. The Indo-Europeans were all ruddy in complexion. From the foothills of the Himalayas across the table-lands of Persia into Ionia and Macedonia and Greece and Italy and the "isles of the gentiles" the same fundamental race complexion is discoverable. Likewise, the Semites and the Hamitic races, noted from the historical point of view, are found to be of the same bodily color. Language contributes its evidence also to establish the same general fact as to the complexion of the Indo-European and other Noachite families of men. They were all ruddy, and the hint in Genesis of the *red-earth* color of the Adamite would seem to be justified by the facts observable in several of the principal divisions of the human family.

What races may be correctly classified as ruddy.

THE BROWN TYPE—MISTRESS SENKI.
Drawn by E. Ronjat

II. THE BROWN RACES. — The second fundamental division of mankind determined on the line of color is by the *brown* complexion, which characterizes many of the leading races. It will be observed from the selection of this hue that many varieties of color may be referred thereto. Several shades of yellow and of red may be correctly carried back into a fundamental brown, which is the composite of black with one of the two tints referred to. Careful observation will show that this is the actual color of the

General analysis of the Brown races.

great races of Northern and Eastern Asia, as well as of all the aborigines of the two Americas and Polynesia. As the major division of these races we may cite:

1. The *Asiatic Mongoloids*, corresponding in general terms with the Mongolian race indicated by historical inquiry, or with the two divisions of the Turanians according to the linguistic division.

2. The *Polynesian Mongoloids*, or the peoples scattered through the islands of the South Pacific, with the exception of the Melanesians and the Australians.

3. The *Dravidians*, or the Deccanese and the people of the Micronesian islands north and east of Australia.

III. THE BLACK RACES.—It is clear, on an examination of the facts, that many of the peoples, even the primitive races distributed in portions of the world lying in the equatorial regions, are properly defined as *Black*. The pigmentary deposit under the cuticle is of such a character as to absorb all or the greater portion of the rays of light, and to return to the eye only that negative sensation which we define as blackness. The line of chromatic division between these races of Black men and those who were defined as Brown, is that under the cuticle of the skin of the latter peoples a certain percentage of coloring matter is combined with the black pigment, producing the various shades of color known as brown.

The four groups of the Black races.

This characteristic difference between the two colors is constant, and tends to perpetuate itself by the physiological law called "reversion to the original type." This is to say that in a contact of the various races, Black and Brown and Ruddy, and in their intermingling of blood, there is a tendency for one or the other of the elements of ethnic constitution to declare itself and become dominant over the rest. Given a sufficient lapse of time, and these intermediate varieties return to the one or the other of the original types from which they are derived. Geographically speaking, the Black races are distributed throughout the larger part of Africa and through the whole of Australia and that portion of the Pacific archipelago called Melanesia. These are the limits of the natural dispersion of the Black races. The ethnic divisions of this third primary family of men are:

1. The *Negroes*, who occupy the larger band of Central Africa from east to west, and are also distributed through a great portion of the southern division of the continent.

2. The *Australians*, occupying all of Central and Southern Australia, except the coast region on the east and north.

3. The *Hottentots*, distributed through the larger part of the southern extremity of Africa.

4. The *Papuans*, occupying the island of New Guinea, the northern and eastern maritime districts of Australia, the island of Tasmania, and, in general, the Melanesian archipelago.

The foregoing classification of the human race on the scientific method and by the distinction of color is, perhaps, as nearly a satisfactory solution of the problem as can be given in the present state of knowledge. The three distinctions of Ruddy, Brown, and Black races are fundamental. They are broad enough to include the whole race of man, with its multiform developments in ancient and modern times. The classification is sufficiently ample to embrace in its major and minor divisions all the races and peoples which have been distinguished

Other plans of classifying may be harmonized with this.

from each other by means of historical and linguistic inquiry. It is easy to conform to this plan of division all the others that have been suggested, and to make them consistent with the wider and more scientific scheme. Thus, for instance, the biblical race of Japheth, the historical divisions of mankind called Indo-European, the ethnic branches of men called Aryan in the linguistic classification, all fall under the common designation of Ruddy races. With these are grouped by means of the same color distinction the Semitic families of men, and also the Hamitic divisions. These ten races taken together constitute the whole group, which may be defined by the term Ruddy and considered as of a primary, common descent.

THE BLACK TYPE—NEGRO MAKUTULU.
Drawn by Riou.

In the second place, the widely disseminated Brown races, covering nearly the whole of Asia, the two great continents of the West, and the greater part of Polynesia, may be grouped together on the line of color and considered as a common family in its origin and race descent. It will be the purpose in the following pages of the present book to trace out the lines of the great tribal and race divergencies and migrations which in the lapse of ages have carried these Brown peoples over by far the largest districts of the earth. It will be understood, of course, that the race classification of the peoples of the two Americas as here presented relates to the *original peoples* of these continents, and not to the Indo-European nations that have taken possession of them in recent times by migration and conquest.

General distribution of the Brown races.

The third general division as indicated in this analysis on the basis of color has already been pointed out in its ethnic and geographical distribution. No branch of the Black races has of its own motion crossed the equator of the earth to a point higher than the twentieth degree of north latitude. It will be found in the subsequent chapters of this book that the dispersion of this division of mankind was by means of a westward stream flowing in from Eastern Africa and spreading in many branches through all those parts of the continent between the equatorial region and the Cape of Good Hope, while the eastern stream bore off by way of Southern Hindustan into the great, closely distributed islands lying to the south of Asia. It is believed that sufficient is now known of the

Outline of the dispersion of the Blacks.

movements of the Black races to delineate their tribal divergencies and migrations with tolerable certainty, and although much will remain to be rectified and amended by subsequent investigations, something may be at present advanced to enlarge the borders of common knowledge relative to this the least known and least progressive of the great divisions of mankind.

From these considerations and others that may be readily deduced therefrom, it has been determined to employ in the present work the scientific method in classifying the different races of men, and to use the *color of the body* as the fundamental fact in considering the scheme of division. In all the subsequent parts of the present work, in the description of the migrations of the primitive tribes and families of men, in the delineation of manners and customs, and the peculiarities of national development which will in great measure fill up the body of the work, it is purposed to keep always in mind this fundamental division of mankind into, I. RUDDY RACES; II. BROWN RACES; III. BLACK RACES; with their manifest divisions into the three branches, Hamite, Semite, and Aryan in the first; three divisions of Asiatic Mongoloids, Polynesian Mongoloids, and Dravidians, in the second; and four branches, Negroes, Australians, Hottentots, and Papuans, in the third. These ten race classes of mankind will constitute the basis of much of the discussion in the present and the succeeding volumes.

Mankind to be divided into Ruddy races, Brown races, and Black races.

CHAPTER XXIV.—NOACHITE DISPERSION CONSIDERED.

SO far as the present resources of human knowledge have indicated the primary seat and early movements of the Ruddy races of mankind, the same began on the north shores of the western gulf of the Indian ocean. The scene of this important primitive aspect of the race was probably in the southern part of Beluchistan, eastward from the Persian gulf. When these statements are made the whole of our knowledge on the subject may be said to have been delivered. History knows little besides of the time or the advent of this primary stream of human existence; but it can hardly be doubted that this is the real seat of the Adamite and his descendants. Ethnologists have generally been disposed to go further, to trace backwards the stream of this division of the race to the shores of ocean, and thence to carry it by hypothesis far out into the so-called Lemuria, a supposed submerged region in the bed of the Indian ocean.

Primitive seats of the Adamites.

On the theory that the Black, the Brown, and the Ruddy races of mankind have all had a single ancestral origin, there is some ground for such a hypothesis. The first tribes of Black men appear to have struck the continent of Africa from the east. In like manner the Brown races seem to have touched the continent on the coast line eastward of the Persian gulf; while the ancestors of the Australians and Papuans appear

Apparent point of origin for all the races.

to have reached their destination from the northwest. Thus the observer, standing on the western shore of India, the eastern shore of Africa, or the southern shore of Beluchistân, would seem to see the three major divisions of mankind approaching from the deep, as if from some common origin under the sea.

Nor has tradition been wholly silent in witnessing to such a primeval movement of the race landwards from the sea. One of the oldest traditions on record is preserved in a fragment of Berosus, and indicates the ocean origin, not only of the arts, but of man himself. A portion of the story is as follows:

Berosus recounts the myth of the sea god Oan.

"Then there appeared to them *from the sea*, on the shore of Babylonia, a fearful animal of the name of Oan. His body was that of a fish, but under the fish's head another head was attached, and on the fins were feet like those of a man, and he had a man's voice. The image of the creature is still preserved. The animal came at morning, and passed the day with men. But he took no nourishment, and at sunset went again into the sea, and there remained for the night. This animal taught men language and science, the harvesting of seeds and fruits, the rules for the boundaries of land, the modes of building cities and temples, arts, and writing, and all that pertains to civilization."

In the fifth chapter of the book of Genesis we have an account of the Adamic race from the beginning down to the Deluge. This space is occupied with ten successive patriarchs and their expanding families. To these great longevity is attributed, and the narrative indicates in various ways the rapid tribal development of the race. It will be noted also by a comparison of the fifth chapter with the fourth that two parallel lines of descent are recorded, the one through Cain, and the other through Seth. "For," said Eve, "God hath appointed me another seed instead of Abel, whom Cain slew."

Outline in Genesis of the Adamic races.

LANDSCAPE OF THE NOACHITE DISPERSION.—BENDER-DILEM.—Drawn by Taylor, after a sketch of Houssay.

The Adamic descendants are traced in the fourth chapter down to the children of Adah and Zillah, the two wives of Lamech; that is, to Jabal, "the father of such as dwell in tents and such as have cattle;" to Jubal, "the father of all such as handle the harp and organ;" and to Tubal-cain, "an instructor of every artificer in brass and iron." Here the narrative ends, and the other branch of the Adamites, that is, the descendants of Seth, are taken up, down to Noah, the son of Lamech. The recurrence of common names in both lines of descent introduces a good deal of confusion, but the line of Seth, considered by itself, is straight through ten generations.

The Hebrew narrative of the Adamite and his posterity to the Deluge is here cited in part because of its striking parallelism with the secular tradition handed down by Berosus. This celebrated ancient author was a priest of Bel, at Babylon, and flourished there in the first half of the third century before our era. He was a native of the country and well acquainted with its earlier and later history. He knew as well as one might know in an uncritical and credulous age the annals not only of the later Babylonian empire, but also of the older Chaldæan dominion which had been established on the lower Euphrates in the very earliest stages of human history.

Value of the Berosian account of the Chaldæans.

In that part of his work devoted to the chronology of the Chaldæan kingdom, Berosus describes the epoch before the flood; for, like the Hebrew author of Genesis, he has an account of a universal deluge of waters, through which a single great captain named Xisuthrus, with his family, came safely in a ship and descended from a mountain, to repeople the earth. To the antedeluvian era Berosus also assigns a dynasty of ten kings. To these reigns of fabulous duration are given the ten eons of their dominion, being as follows:

Ten Chaldee mythical kings; conformity to the Hebrew scheme.

	Years.
1. Alorus, a Chaldæan, who reigned.....	36,000
2. Aloparus, son of Alorus, who reigned...	10,800
3. Almelon, a native of Sippara, who reigned.	46,800
4. Ammenon, a Chaldæan, who reigned....	43,200
5. Amegalarus, of Sippara, who reigned...	64,800
6. Daonus, of Sippara, who reigned.....	36,000
7. Edorankhus, of Sippara, who reigned...	64,800
8. Amempsinus, a Chaldæan, who reigned	36,000
9. Otiartes, a Chaldæan, who reigned.....	28,000
10. Xisuthrus, the Chaldæan Noah, who reigned	64,800
A total of ten kings, reigning.....	431,200

The general conformity of these two schemes of ethnic descent must be patent at a glance. The Chaldæan and the Hebrew accounts of this dim age of an ancestral race agree in the important consideration of ten successive patriarchical kingships. It is easy to observe the more moderate conception and outline of the Hebrew scheme of descent and longevity, and the wild extravagance of the Chaldæan tradition. But the pattern and outline of the progress of the race are alike in both, and in either case this line of long-lived mythical rulers ends with a righteous captain, whose virtue and wisdom, in the wickedness of his surroundings, enable him to go safely through the waters of a deluge and repeople a new world on the hither side of the catastrophe.

The identity of the two narratives in their essential spirit and leading features can hardly be doubted. We thus see in the maritime parts of Beluchistan, at a time almost unimaginably remote, even from the standpoint of the oldest historians who have attempted to trace the course and development of mankind,

The headmen of the Adamite clans.

the apparition of a ruddy race of men expanding through a mythical age of unknown duration, and entering at least three stages of civilizing activity. Jabal was the "father of such as dwell in tents and of such as have cattle." This is manifestly an outline of the beginning of the pastoral life which occupied so large a part in the subsequent history of the races of Western Asia. Jubal, the brother of Jabal, is represented as being the "father of all such as handle the harp and the organ." From this we are to infer that at least the musical branches of art made their appearance in the East contemporaneously with the development of the pastoral life. The makers of tents and the keepers of flocks and herds discovered harmony, and became the makers of such instruments as have pleased the senses of men in all subsequent ages with the concord of sweet sounds.

To the same epoch, or a little later, in the tribal evolution, is assigned Tubal-cain. He is represented as a worker in brass and iron. Very notable is the fact that the composite metal *brass* is here mentioned as the material of the earliest metal work of the Adamites. Iron also is named as the other substance in which Tubal-cain and his successors became proficient as workmen. It would appear in accord with right reason that both of these names of the metals are erroneously deduced from some original which has been misunderstood in translation. The primitive men could hardly have begun as workers in *brass*, since the

Question of the primitive metallurgy of the Semites.

THE FATHERS OF "SUCH AS DWELL IN TENTS"—OLD SEMITIC TYPES.

copper and zinc of which it is composed must first have been employed and the ratio of their combination discovered before brass could have an existence. Moreover, the extraction of iron from the matrix is a process so difficult and so late in the order of metallic discovery that, as we have already seen in another part of this work, it follows and does not precede the discovery of copper, of tin, of the precious metals, and, indeed, of nearly all the other metallic elements common to the surface of the earth.

At the close of this Adamite period in the history of the Ruddy race we come to that great catastrophe, the Deluge of waters. In respect to this event tradition was busy throughout the primitive world. Among almost every people there was a mythical reminiscence of a flood by which their ancestors were destroyed from the earth. The diluvian legend generally assigned the wickedness of the race as a cause of its overthrow. The tradition of such a visitation always presented itself most emphatically in countries so situated as to be subject to inundations. Perhaps the greatest seat of such a belief was in the valleys of the Lower Euphrates and Tigris. It was from this region that the Hebrew account of the Deluge was transmitted by Abraham and his posterity to the west, and there recorded in the annals of that people. At the same time a like tradition was handed down among the Chaldæans, and at a later epoch in history was repeated and modified by the Assyrian seers, on the Upper Tigris. The story of Deucalion and his survival of the Deluge was rife among the primitive Greeks, and other primeval nations had like accounts of a like disaster.

Dissemination of traditions of a deluge.

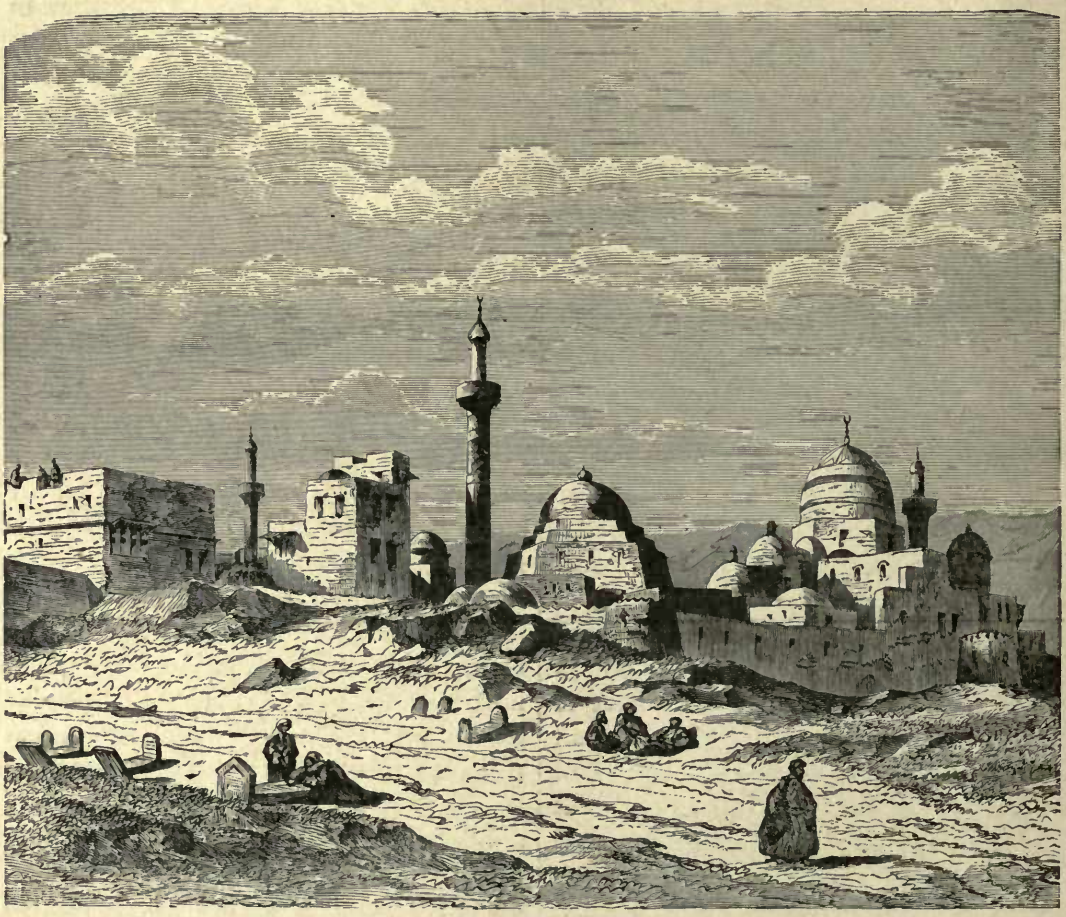
To this general dissemination of the belief in a deluge of waters by which the race of man was swept away, the ancient Egyptians furnish a remarkable exception. Their legends and mythology furnish no account of any such event, either in the primitive or later ages of their country. It is easy to see in this fact the action and reaction of natural and supernatural elements in the primitive history of a people. The Nile is, perhaps, the only river in the world whose swellings and fallings obey a certain law, the knowledge of which secures the inhabitants of the valley from disastrous consequences. The regularity of the coming and the recession of the waters furnishes a guarantee against all harm. A curse is thus converted into a blessing; and the river becomes, instead of an object of dread and superstition, an object of reverence and worship! The uniformity of nature stood guard over the welfare of the people who built the pyramids, and even if a prehistoric deluge had occurred before the civilized development of the Egyptian race, the tradition of it would have perished in the presence of the future beneficent conduct of the great river. In other valleys of the East irregularity rather than uniform flood and subsidence was the law, and wherever, as a result, disaster on many occasions and from natural causes must necessarily have ensued to the people living on the river banks, the tradition of a great catastrophe overwhelming all would be perpetuated and handed down as a distinct and memorable crisis in the past history of the world.

Why the Egyptian race possessed no such tradition.

However this may be, we find a remarkable conformity between the Chaldæan and the Hebrew account of the disaster by which the race of man was swept away at the close of the Adamite

era. The well-known narrative of the Deluge given in the seventh chapter of the Book of Genesis need not be here repeated. Nor is it desirable to recount in full the story of the flood as recorded by the ancient Chaldæans and Assyrians. The principal features of the

General harmony of Chaldæan and Hebrew accounts of the flood.



MESOPOTAMIAN LANDSCAPE.—View of Mossul.—Drawn by E. Flandin.

latter, however, will serve to show the fundamental identity of the three principal narratives of the Deluge. The Chaldæan and Assyrian accounts differ in this, that the latter assigns as a *cause* for the destruction of the human race by a flood the wickedness of mankind in the earth, whereas the older, or Chaldæan, account simply recites that the god Bel revealed to Xisuthrus his purpose to destroy the world by a flood. The great captain was ordered to bury the records of his country in Sippara and to embark in a ship, with his kindred and friends. He was also directed to take into the ark with him all manner of living creatures. When everything was completed and the ship, nine thousand feet in length, was closed, the Deluge came. In course of time Xisuthrus sent out birds, which at first came back without evidence of resting, but afterwards with mud on their feet. At length the ship rested on the Gordyæan mountain, and the inhabitants came forth to repeople the earth.

In the Assyrian account the divinity who revealed the flood is Hea, and the Assyrian Noah is named Sisit. He, as

in the case of his Chaldæan prototype, gathered all manner of living creatures and seeds of the vegetable world into his ship. Then Samas, the sun god, sent the flood. There was a great storm that went over the nations, and the waters reached up to heaven. Even the gods had to ascend to their highest thrones and sit there until the subsidence. All living things outside were drowned. At last the waters abated; the ark rested on Mount Nizir, and Bel led forth Sisit by the hand to repopulate the country. It is sufficient to note that the narrative given of the great catastrophe in the seventh chapter of Genesis is much more serious and elevated than the two forms of tradition which were preserved to after times in the valleys of the Euphrates and the Tigris.

The Assyrian tradition departs from the older forms.

Apart from these traditional accounts of the manner in which the Adamite race came to its termination, we turn to a more scientific aspect of the question. It appears that before the destruction of this people, before they had reached the scene—at least the central scene—of their disaster, they had already begun to part into the three branches of ethnic life already mentioned as the major divisions of the Ruddy family of mankind. It is in evidence that the Noachite race, from its old maritime *débouchure* on the shores of Gedrosia, the modern Beluchistan, made its way first to the north, in the direction of the Carmanian desert, and was thence deflected to the west. It was here, on the tableland of ancient Iran, in the district of country east of Yezd, that the ancestors of the Ruddy races of mankind seem to have felt for the first time the impulse of westward migration. Here, at any rate, they were deflected toward the setting sun. Here, too, they appear to have begun that threefold ethnic separation which was destined, in far ages and countries, to give to history some of its most vigorous and highly developed peoples.

Early division of the Adamites into three branches.

If we fall back again for a moment upon the classification the nomenclature of which is derived from the three sons of Noah, we find here the beginnings of the division. So that if we regard the valley of the Euphrates and the Tigris as the center, or seat, of the great diluvian disaster which subsequently occurred, we must conclude that the Ruddy peoples who made their way into these valleys from the east had already separated, or at least begun to separate, into Hamites, Semites, and possibly Japhethites. The adoption of such a hypothesis would tend to explain or remove the difficulty which historians, ethnologists, and linguists alike have experienced in the attempted classification of the most ancient peoples of the Tigrine and Euphratine valleys. This work has never been satisfactorily and conclusively accomplished. In a general way it has been decided that the old Chaldæans were Hamitic in their origin and development. In like manner the preponderance of evidence has tended to show that the Assyrians were Semitic in their race descent and character. But the evidences also indicate much mixture and confusion in the primitive history of these regions.

Uncertain ethnic relations of early Mesopotamians.

It is extremely difficult, either by means of historical traditions, ethnic traces, or linguistic proofs, to determine satisfactorily to which branch of the original threefold division the Assyrians and the Chaldæans respectively belong. Moreover, at later periods, when the Hamitic race has well emerged from this

Point of dispersion eastward from Assyria and Chaldæa.

region, and is discovered with all its peculiar traits in Southeastern and Southern Arabia and in Egypt, and when the Semites have likewise appeared, with their distinctive peculiarities well developed, in the West, the course from which the two races have manifestly come into subsequent fields of activity, when traced backwards, shows a conjuncture *much to the east* of the Mesopotamian region and not in the valleys of the Euphrates and the Tigris. This is to say that at the time when the Hamite, the Semite, and the Japhethite races made their way *through* Mesopotamia to the West, they were already separated geographically, the Hamites being on the south, pressing close to the Persian gulf, the Semites in the center, and the Japhethites close up to the Caspian.

From these evidences and by this just train of reasoning, it would appear conclusive that the primary division of the Noachite family took place in the uplands of ancient Iran, at a point more than ten degrees of latitude eastward from the Mesopotamian region, which may be regarded as the center of the traditions of the Deluge. It is safe, therefore, in the ethnic scheme, to mark the division of the Noachites far beyond and to the eastward of the low-lying alluvial plains of Mesopotamia.

IN KURDISTAN.—View of Little Ararat, with Group of Kurds in Foreground.—Drawn by Alfred Paris.

If, then, the observer should take his stand in the Arabian desert west of Mesopotamia and look thitherward in

the earliest epoch of human development, he might see emerging from the shadows the vanguard of two races, with possibly a third on the north. The Hamitic division of mankind would be seen making its way to the westward, close to the head-waters of the Persian gulf and bending, as if by preference, to the south into Old Arabia, next to the sea. The central phalanx would be the descendants of Shem, heading for the west, and, perhaps, deflected somewhat to the north, on its way from Ur of the Chaldees into Canaan. The Japhetic division, if seen at all, would be well to the north, close to the southern shores of the Caspian, and bending in a northwesterly direction toward the eastern limits of the Black sea. This may be called the Noachite dispersion of the human race. The lines of its progress westward lie between the southern extremity of the Caspian and the northern limits of the Persian gulf. This region is to Europe and Southwestern Asia what the wrist is to the extended palm. Mesopotamia, considered longitudinally from east to west and in connection with Kurdistan, is *a strait*, and through this strait the streams of the Ruddy races of men flowed out toward the open regions in the prehistoric ages.

Issuance of the Noachites to the west.

It is from this point of view that we may, in part at least, apprehend the ethnic characteristics of the primitive peoples of Elam and Chaldæa. Through these most ancient countries the Hamitic division of men made their way in their earliest departure and migration from the parent stock. It is, perhaps, safe to say that the Elamites were the first development of a Hamitic nationality in the world. This earliest lodgment of the oldest branch of the Noachites was in the country afterwards called Susiana by the Greeks, and the dominion established here remained for many ages a seat and stronghold of the primitive race. Historical traditions indicate that the Hamites came into this region by invasion, and that they displaced, by conquest, the original Semitic and possibly Turanian peoples who were there before them.

Probable directions of the Hamitic dispersion.

This view, however, is a doubtful hypothesis. As already stated, it is likely that the disentanglement of the Semitic and Hamitic tribes had not yet been completely effected when the Elamite nationality was founded; and it may well be confessed that Semitic influences were afterwards discoverable in the development of what was truly a Hamitic dominion. Geographically considered, the country here referred to was bounded on the north by the river Diyalah, on the east by the Kebir Kuh mountains, on the west by the Tigris, and on the south by the Persian gulf. It was a low-lying country, fertile and inviting, identical almost in character with those other regions of the world—Chaldæa, Southeastern Arabia, the valley of the Nile—where the Hamites established in subsequent ages the seats of their dominion.

Traces of ethnic admixture in primitive Elamites.

Primitive Assyria may be assigned to the Semites. Asshur was the son of Shem. The position of Assyria, *east* of the Tigris rather than in Mesopotamia Proper, would indicate its planting by early tribes of the Semitic race coming from the east. There are evidences that such a dominion, north of the Greater Zab and east of the Tigris, was planted as early as the fourteenth century before our era.

First distribution of the Semites and Japhethites.

The Japhetic branch is generally re-

garded as the oldest division of the Noachite family. The movements of this race have been by far the most complicated and difficult to trace. The first deflection from the parent stem was doubtless to the north or northwest of the common stream flowing westward. The point of departure of the Japhethites has already been indicated. It is more than likely that their first course after separation from the ancestral tribes was so well to the north as to bring them into contact with the lower extremity of the Caspian, in which event they would be turned back or deflected more directly toward Northern Asia. It may be fairly conjectured that this geographical circumstance lies at the bottom of the formation of that great ethnic whirl, or center, from which the Aryan races of subsequent times were all descended. It is not purposed in this connection to trace out the after ramifications of the Japhethites, or, indeed, of the cognate races of the south. It is sufficient to note that from the Japhetic center the subsequent migrations took place in both directions, east and west, while the Semitic and Hamitic movements followed a more orderly progress, the one toward Canaan and the other into Southeastern Arabia.

It has been intimated above that the Old Chaldæan dominion on the Lower Euphrates was Hamitic in its origin. Several circumstances besides the mere course which the tribal migrations were then pursuing may be cited for assigning Chaldæa to the Hamites. Historical evidence shows almost conclusively that there were race prejudices and frettings between the Chaldæans and the Assyrians on the north. The two peoples were hardly ever at peace. There was a divergence of language, of tradition, and of religious ceremonials, but at the same time such striking analogies in all as to indicate close affinities of race.

Indications that the Old Chaldæans were Hamitic.

It was the preponderance and pressure of the stronger Assyrian nationality on the north that, at the close of the fourteenth century B. C., finally overpowered the Chaldæan dominion and replaced it with Semitic influence in the south. By careful observation we are able to see, long anterior to this period, the race troubles between the northern and the southern people. There are indications of invasion and oppression on the part of the Assyrians respecting their southern kinsmen. It is not improbable that these difficulties were at the bottom of some of the earliest migrations to the west. Perhaps Eber, the father of Abraham, had drifted from beyond the Tigris into the low-lying country of the south. His name is said to signify "from beyond;" that is, from beyond the rivers. Doubtless he was either an immigrant into the low country or an invader. A family so situated, expanding into a patriarchical tribe, would soon find itself with unpleasant surroundings, and a cure for local troubles might be sought and found in a further migration into the freer west. Hence the Abrahamic exodus from Ur of the Chaldees.

Race troubles between Northern and Southern Semites.

Another proof of the race diversity already existing between the Old Chaldæans and the people of Assyria is found in the monumental remains of the two countries. There is already a clear departure in the typical physiognomy of the Chaldæans and the Assyrians. The former are like the Elamites in personal characteristics, while the latter are of the well-known Semitic type, with hints of Medo-Persian modifications. It is easy for the ethnographer to see in the

Differences in remains of Chaldæans and Assyrians.

features and person of the ancient Chaldæan the antitype of the Cushite, the Old Arabians, the Hamitic Canaanites, and even the Ethiopians and Egyptians. It will be readily agreed that the Semitic peoples became, in the course of time, predominant throughout Mesopotamia. It is likely that the Hamitic race, by pressure from the north, became attenuated even to actual separation around the head of the Persian gulf, and that the Elamite dominion on the east preserved the principal, if not the only, remnants of that race beyond the meridian of Chaldæa and Assyria.

Significance of the Noachite patronymics.

Several facts of some interest come to light on an examination of the ethnic names of the three branches of the Noachite family. The word Shem means a "name," or more properly, "sons of a name." The sense is, that this division of the Noachites was an aristocracy *having a name*, that is, a lineal descent from reputable fathers, as distinguished from the no-name, or base-born, descendants of other stocks. The early Semites evidently regarded themselves as peculiarly the representatives of the Noachite race, and perpetuated the belief in the nameless, that is, the gentile, character of the cognate families of their own descent. The innuendo was directed against both the Japhethites and the Hamites, particularly against the descendants of Canaan in the west, whom the sons of Shem afterwards overcame and expelled from their territories.

Contention for precedence among Shem, Ham, and Japheth.

The evidence of this race contention and feud is plentifully scattered in the Hebrew writings. The old prejudice lies at the bottom of the relative priority of the sons of Noah. As a matter of fact, the Japhethites were the eldest, the Hamites second, and the Semites the youngest division of the Noachite family. But there was a constant effort, extending through many centuries, on the part of the Hebrew scribes and chroniclers to change this order and to give to Shem the rank peculiar to the eldest son. In the biblical ethnography the order of the three descendants is always given thus: Shem, Ham, Japheth. But it will be observed that even in the tenth chapter of Genesis, while the first verse preserves this order, giving priority to Shem, the analysis of tribes which immediately follows places Japheth in his true position, and assigns the place of youngest son to Shem. Such primitive quarrels as to the seniority of descendants were very common among the early families of men, and are of little value to modern scholarship except as illustrative of a striking and persistent feature of organization and belief existing in the earliest ages of human development.

Strife of the ancients for the rights of priority.

All the ancient nations strenuously insisted that they were respectively the most ancient of all. Priority seems to have been an idea which sufficed to establish right, and make all things legitimate in primeval society. "We were here first, and therefore possess this region, and are greater than you," was the language of every primitive people to its neighbors. As a result of this disposition, claims to extravagant antiquity were advanced by all, and were attested by long lines of successive monarchs, in successive dynasties, extending through fabulous ages. One of the principal devices to make good such claims was to extend the lives of their rulers to hundreds and thousands of years. The Berosian scheme presented above of the Noachite dynasty in Chaldæa down to the epoch of the

HAMITIC RUINS AT DJAMA SIDI OKBA.—Drawn by H. Saladin, from a photograph.

Deluge is a sample of the plan which the ancients adopted to make good their claim of primogeniture and proscriptive right. The Egyptians, not satisfied with even the fanciful expansion of their dynasty, were wont to abandon terrestrial criteria and appeal to the planets for their antiquity. It was a common boast among the Egyptian priests that their people were *Proselenoi*, that is, pre-Moonites, older than the moon in their occupancy and possession of Mizraim.

In the discussion of the Mesopotamian development of the different branches of the Noachite races, no attempt has been made to establish the chronological relations of the several ethnic divisions in the dispersion, or even to date the general epoch to which they all belonged. In fact, chronology is wholly at fault in considering such primitive movements of the race. As to the time when the Noachites may be said to have been deflected to the west, and to have begun their separation into different peoples, nothing can be alleged with even approximate certainty. The whole tendency of recent inquiry has been to extend the time relations of these early events. It is clearly perceived that the notions formerly prevalent about the time required for the peopling of different and distant regions of the earth, and the development therein of distinct nationalities, must be abandoned as totally inadequate for the ethnic evolutions to which they refer. It is known that the first progress of men gathering into tribes and nations is exceeding slow as compared with subsequent stages of human development. There is an accelerating tendency in the progress of mankind, and this manifest fact emphasizes the necessity of widening and enlarging the whole scheme of ancient chronology.

Chronology at fault respecting the Noachite races.

As it respects the Semitic and Hamitic peoples who created the earliest civil societies in Elam, Chaldæa, and Assyria, a few suggestions may be offered as to the time when the same occurred. If we look at the rise of the Hamitic race in the valley of the Nile we discover the most emphatic evidence of a very remote antiquity. It is safe to affirm that almost as early as four thousand years before the common era the primitive Egyptians, who themselves seem to have taken possession of the valley by conquest, were already a strong and progressive people. They had civil organizations and many well-developed institutions of religion and secular society. They were magnificent builders in stone, and appear to have been, from the earliest date of their *débouchure* into Northeastern Africa, in possession of considerable scientific knowledge. These Egyptians were descendants of the older Hamites in Asia. They came by migration and invasion into the country of their subsequent development. For this movement out of Asia much time must be allowed.

Evidence of great antiquity of Egyptian Hamites.

A greatly extended period must have elapsed between the founding of the first Hamitic societies in Lower Mesopotamia and that subsequent time when the Hamitic tribes, making their way westward through Syria, established themselves in Egypt. It is true that the formal chronology, so far as it has been recovered and reconstructed for the Chaldæan ascendency, does not by any means reach a period so remote as that of Egypt. But the movement of the race to the westward points unmistakably to the fact that the Chaldæan ascendency and the dominion of Elam were *long anterior* to the creation of political power in the val-

Probable derivation of the Egyptians from Chaldæa.

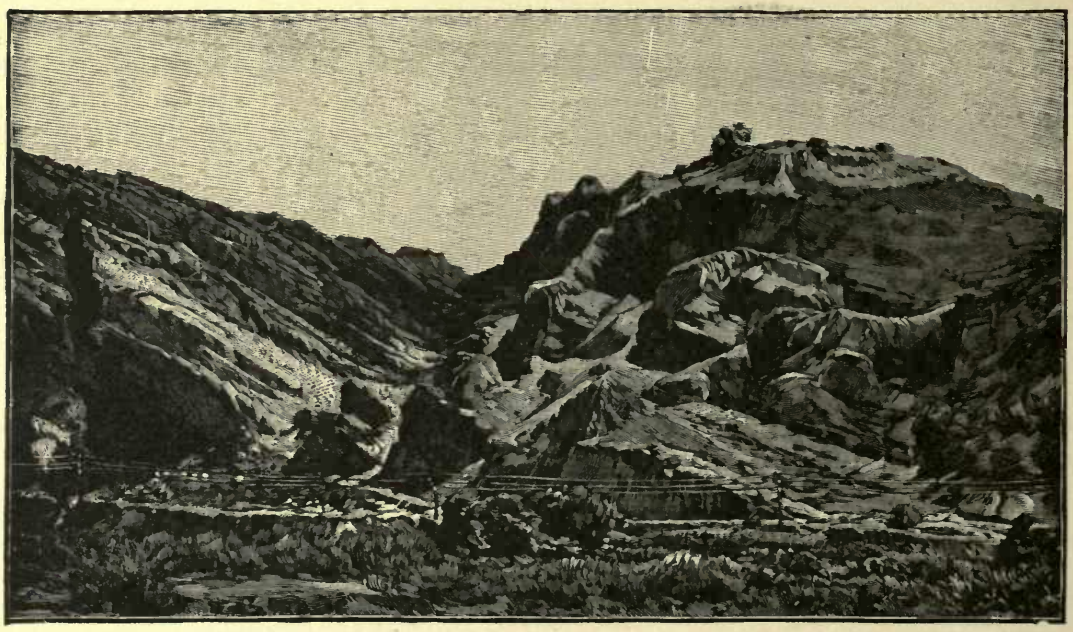
ley of the Nile. This indicates for the primitive peoples of Mesopotamia an antiquity far greater than history, or even ethnology in its current phases, has been accustomed to assign or accept.

The country lying between Armenia and the head of the Persian gulf furnishes a good example of the influence of physical environment on the movements and development of the early races. Mesopotamia constituted a

Effects of environment on the migrant Noachites.

its way, while through the gaps of the Zagros the Semites would precipitate themselves into Upper Mesopotamia.

Before the immigrants would spread an open country, traversed by two great streams of living water, fertile in natural products, and inviting to settlement. The alluvial plain in Lower Mesopotamia would in a special manner provoke to permanent residence from the ease with which multiplying tribes could here support themselves by the resources of the



PASS IN THE ZAGROS MOUNTAINS.—Drawn by D. Lancelot, from a photograph.

natural, perhaps an inevitable, stopping-place in the westward movement of the Noachites. Such was the situation as to make it necessary for them to pause, and to pause meant the growth of fixed societies. On the east of this region the country is defended by the bulwark of the Zagros and Kebir Kuh mountains. It is easy to see how the already half-separated races, drifting from the east, would be impeded for a time by the interposition of the mountain range. Presently, however, through the southern passes, the Hamitic division would make

earth. Adventure would soon carry the still half-nomadic peoples across the country to the western borders. Here, however, there would be a pause. Even the civilized man hesitates long, and the compulsion must be extreme ere he throws himself into the desert. Perhaps of all the natural landscapes presented on the surface of the globe the most forbidding and repellant is the desert.

West and southwest of Mesopotamia is a wide stretch of desert country. It fatigues the eye and scorches the feet. On the north is the Assyrian desert, and

to the south and west stretches away the seemingly infinite waste of Arabia. Here are the fundamental conditions which made Chaldæa and Assyria a sort of necessity in the progress of the early race. It is not needed in this connection to enter elaborately into the geography of the valleys of the Euphrates and the Tigris and the adjacent upland countries. On the north, from the Caspian to the Black sea, stretch the Armenian mountains; on the south, is the sea; on the east, the Zagros range, and beyond, the great plateau of Iran; on the west, the boundary line is the long stretch of the Syrian desert.

Chaldæa and Assyria a necessity of the early peoples.

At the time of the development of the early empires in these valleys and for ages afterwards the two great rivers still discharged their waters by separate channels into the Persian gulf. Mesopotamia reached to the sea, and the mouths of the rivers were fully a hundred miles south of the present shore line. Along the banks of these streams, high up to the foothills out of which their upper waters are drawn, especially on the east by a multitude of smaller streams, the earliest, or at least one of the earliest, civilizations was developed in the world. It was the work of the Ruddy races coming from the east. Here they planted themselves at the north and the south, according to their race descent, and became in course of time much more strongly marked by ethnic differences than they were on their first arrival in the country. It is from this region that the different races belonging to the Hamitic and Semitic families of mankind made their way at length into the western foreground of history, where we shall discover them in a somewhat clearer light than that in which they have thus far been revealed. Here, then, is the end of what may be appropriately called the Noachite dispersion of mankind.

The Ruddy races plant themselves in Mesopotamia.

CHAPTER XXV.—THE HAMITIC MIGRATIONS.

IN the current chapter the attempt will be made to trace out geographically the various lines by which the Hamitic race was distributed, first into Southwestern Asia, and thence through a large part of Northern Africa, to the borders of the Western ocean. The inquiry will begin with the movements of the Hamitic division of mankind, not from any preference for that race as a dominant people of antiquity, not because their civilization reached a higher stage than that of the cognate races, but rather for geographical reasons. The Hamites were distributed to the south and west, and are thus the southernmost branch of the Ruddy races. It will, therefore, be convenient to begin on that side of the ethnic distribution which lies nearest to the lines marking the dispersion of the Black races, and thence to pursue the inquiry northward until the Hamitic movements have been exhausted. In the next place, the various branches of the Semitic family may be taken up and considered in like order, leaving the Aryan, or Indo-European, divisions of mankind, most important of

Hamitic races lie nearest the Blacks in race distribution.

all, historically considered, for the concluding chapters on distribution.

Historical reasons for the migrations of the Hamites.

The historical circumstances which gave rise to the first departure of the Hamitic emigrants from Lower Mesopotamia for the southwest are not known. It is not unlikely, however, that the pressure of the stronger Assyrians on the north, who by repeated invasions and conquests reduced the old Chaldæan empire to a condition first of dependency and then of actual subversion, may have been the occasion, if not the real cause, of the first migratory movements of the Hamites in the direction of Arabia. It is not known whether this primitive impulse was coincident with the Chaldæan ascendency in Lower Mesopotamia or subsequent thereto, but the former supposition is more in accord with right reason and with such other facts as bear upon the question. At any rate, the first dispersive migration of the Hamitic family was from the primitive seat of the Chaldæans toward the south and into the maritime parts of Arabia.

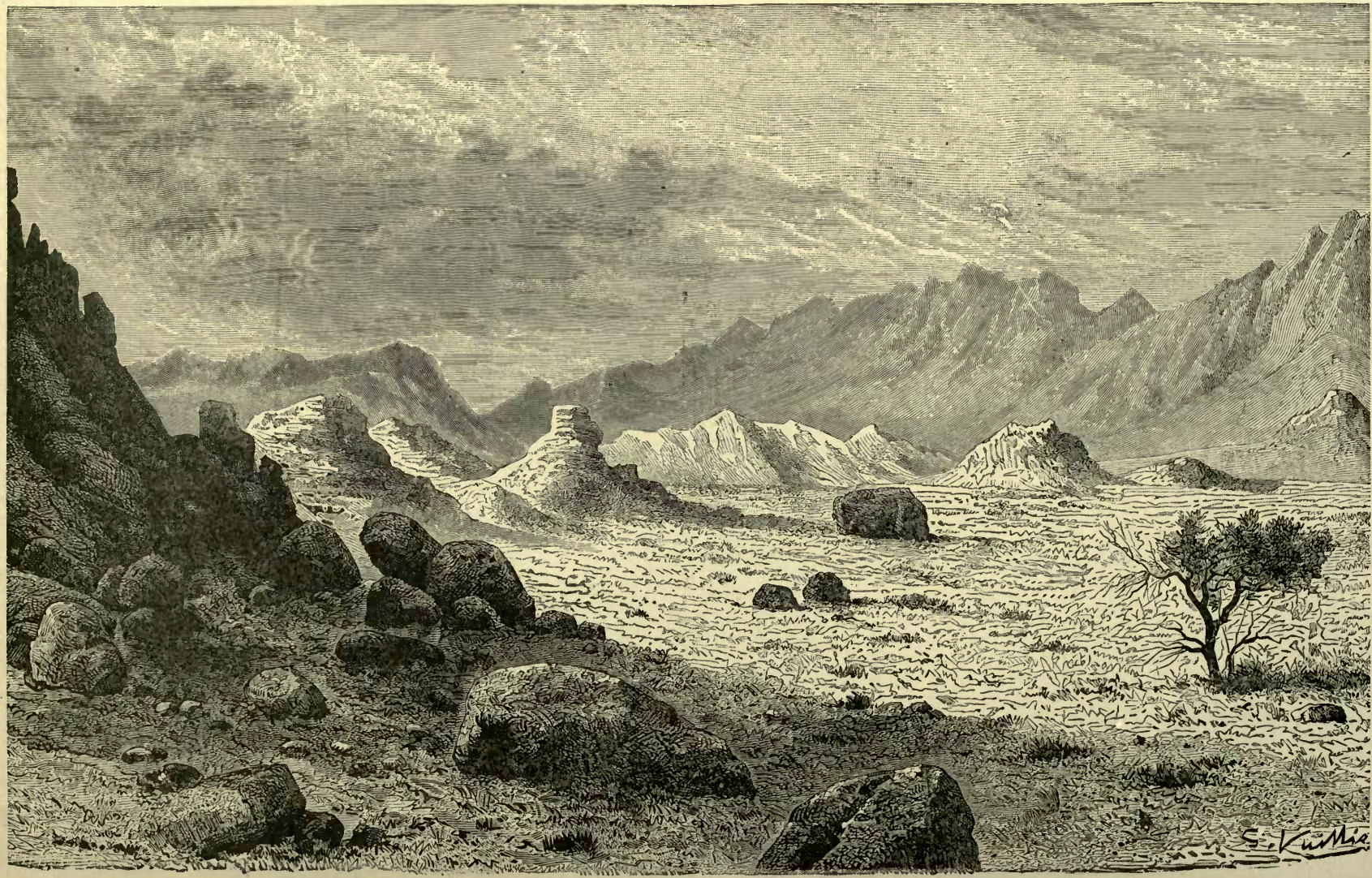
Primitive Arabian population of Hamitic descent.

It is likely that the first progressive people in the Arabian peninsula were the descendants of the migratory movement here described, and that they belonged to the maritime parts adjacent to the Persian gulf. The primitive Arabians of the eastern parts next to the sea were of Semito-Hamitic origin, and that they antedated the Central and Western Arabians may be safely inferred from the ethnic movements then prevailing in the world, and also from an old preference of the early races for the seashore and the regions adjacent. A glance at the geography of the peninsula will show a range of mountains between the modern Arab state of Hasa and the great desert. It was through the strip of territory lying between these mountains and the Persian gulf that the earliest tribes of the Hamitic family made their way to the southwest. In the lower part of the peninsula the migration divided, throwing off one branch into the modern province of Oman, while the major division was deflected somewhat in conformity with the coast line to the southwest, toward the modern state of Yemen, adjacent to the strait of Bab-el-Mandeb. Such in general was the direction of the oldest ethnic line in the Arabian peninsula, and it was from this primitive migration that the Old Arabs, as contradistinguished from the more recent Ishmaelites, were derived. The former were, in general terms, a maritime people, and to the present day the distinctions between their descendants and the Arabians of the regions bordering on the Red sea are sufficiently marked.

Himyaritic writings show traces of Hamitic production.

Throughout the whole of Southern Arabia, especially toward the southwestern termination of the peninsula, are found linguistic traces of this ancient people. A class of primitive writings, called *Himyaritic Inscriptions*, testify unmistakably of the presence of a peculiar people in the regions where they are found. These writings, generally engraved on stone, have been one of the most interesting and puzzling studies presented to modern students of language, and there has been great diversity of views in regard to classifying the original speech to which these writings belong. Many most eminent linguists have regarded them as of a Semitic origin. Another plausible view is that of Renan, who holds that the inscriptions in question differ too widely from Arabic and cognate varieties of Semitic speech to be classified therewith.

These facts open a question of much



LAND OF THE JOKTANIANS.—Mountain View in Hasa and Camp near Hail.—Drawn by G. Vuillier.

importance respecting the affinities of the Hamitic and Semitic languages. It appears that the linguistic separation of these two races was never so complete as the division of either of them from the Aryan families of the north. It is likely that in manners, institutions, language, and laws the primitive Hamitic tribes held together with their Semitic kinsmen until common linguistic forms had been in a considerable measure fixed in each, from which circumstance considerable similarity would appear in the subsequent development of the respective languages. On the whole, it is safer to classify the Himyaritic inscriptions with the other Semitic dialects, and to admit the influence of the Hamitic Arabs in giving particular features to the writings of Southern Arabia.

Affinities and connection of Hamitic and Semitic languages.

Wherever the inscriptions in question may be placed in linguistic classification, it is certain that their origin is extremely ancient, and that they were deduced geographically from Lower Mesopotamia. The line of these writings has been traced from about the junction of the Euphrates and the Tigris all the way around through Southeastern and Southern Arabia to Yemen, and even across into Africa. The explorer Loftus found a sandstone slab covered with Himyaritic inscriptions in one of the mounds of Warka, in ancient Chaldæa. Two specimens of gems covered with like characters are preserved in the British Museum. Coghlan and Playfair made similar discoveries at Amran, near Sana. In short, the identity of the writings along the line of the extreme southern dispersion of the Hamites is clearly established.

Wide distribution of the Himyaritic inscriptions.

The Himyarites, as a people, occupied the southwestern extremity of the Arabian peninsula. They are nearly identified geographically with the inhabitants of the modern Yemen, though the Himyarites were further south and more maritime than the modern Arabic state. It will thus be seen that the Hamitic branch of mankind which we have been tracing was brought, in its southwestern migration, to the southern neck of the Red sea. It was not likely that so narrow a strait of water would prevent the further dispersion of the ancient stock. The opposite African shore is embraced in the small maritime districts called Samara. More generally, it is Abyssinia to the north and Somaliland to the south.

Geographical position of the ancient Himyarites.

The fact has long been recognized that there was an ancient race identity between the peoples inhabiting the countries on the two sides of the strait of Bab-el-Mandeb. The belief that the Old Abyssinians were of Semitic derivation, and the knowledge that they were of the same race with the people of the Himyaritic district in Arabia, has led to the conclusion that the latter were Semites, and this belief has been perpetuated by the discovery of strong Semitic traces in the Himyaritic writings. The Abyssinians and other ancient Ruddy races of this region of Africa were clearly in some sort of race affinity with the Egyptians, the Canaanites, and the Old Arabians, as well as with the Semites proper. The whole question clears up on the hypothesis that this most southerly division of the Noachite descendants was Semito-Hamitic, and that the Semites proper were dispersed toward the south about to the center of the Arabian peninsula. It is true that some ethnographers have carried the Ishmaelite migration southward along the eastern shores of the Red sea to the

Race kinship of Southern Arabs and Eastern Africans.

strait, and thence into Africa, which would bring the Semitic tribes into the same country with the cognate Hamites, but it may be doubted whether the true line of Ishmael was ever carried so far in that direction.

If we attempt to trace the Hamitic dispersion beyond the crossing into Africa, we shall find the migration pursuing the same general course to the southwest which it had taken while in Southern Arabia. It appears that the peoples of this stock were thinly distributed from the strait of Bab-el-Mandeb, in the general direction of the Victoria Nyanza, and that the westward progress of the Hamitic race was finally checked in this region. The Somalian peoples of the extreme eastern portion of Africa were doubtless derived from a deflected branch of this Semito-Hamitic migration; and, in general, the Noachite races of Gallaland had the same origin.

Distribution of Hamitic blood in Eastern Africa.

One peculiar feature of this African distribution of the Ruddy peoples from Arabia was the fact that the lines of their progress to the southwest into the continent must have crossed the westward-bearing divisions of the Black races. The ancestors of the Hottentots and the Negroes made their way from the east through this same region of Gallaland, and their migratory intersection with the south-bearing progress of the Hamitic family must have constituted one of the earliest, if not, indeed, the very first, contact of the Ruddy with the Black races of antiquity.

Crossing of the ethnic lines in Gallaland.

Meanwhile Syria, almost directly west from Chaldæa, had also been preoccupied by Hamitic tribes. While the movement into the maritime parts of Arabia had been going on, another division of the Hamitic stock had made its way out of Mesopotamia to the west. It appears that this migration divided in the desert country on the Syrian borders, one branch being deflected into Western Arabia, and the other pursuing its direct course toward the sea at Suez. If we take up the first division, we shall find the line of its dispersion drawn through Southeastern Syria and thence in the direction of Medina and Mecca. There can be no doubt about the race descent of the original peoples of this region. They were prior to the first Semitic mi-

Syria is preoccupied by Hamitic immigrants.

DESERT COUNTRY OF THE SYRIAN BORDERS.—The Plain of Tortose.—Drawn by A. de Bar, from a photograph by Lockroy.

grations or invasions of the west; and the aboriginal substratum of the more recent Ishmaelites and Joktanians was undoubtedly of Hamitic origin.

Divisions and resultant plantings of the migration.

It was the peculiarity of the westward course of the Hamites from Central Mesopotamia that they divided north and south in their progress. At first, the volume of national life which flowed off toward Syria contained the potency of the Western Arabs, the Canaanites, and the Egyptians. The Canaanitish deflection from the main migratory line was northward, and occurred in the region of Central Syria. The northward-bearing branch from this point entered Canaan Proper and Phœnicia; and here began the development of one of the most prominent divisions of the Hamitic family.

Ham founds Canaan; Hebrews disparage their kinsmen.

Traditional Canaan takes its name from the son of Ham. In the chronicles of the Hebrew race this division of the Hamites is most prominent. They were greatly disparaged by the early annalists of the Hebrew race, and through all subsequent ages were despised and contemned by them as gentiles and servants of servants. It was against these descendants of Canaan in their tribes and generations that the wrath of invading Israel was turned, after the Egyptian exodus.

Extent of Hamitic migrations into Asia Minor.

The progress of the Hamitic migrations to the northwest, around the eastern extremity of the Mediterranean, introduces the inquirer to one of the most difficult passages in the ethnic distribution of mankind. The problem is *the extent* of the migration in the direction of Asia Minor. Ethnographers are not agreed as to how far the Hamitic movement in this direction continued. One class of writers are of the opinion that the traces of this branch of the human family extend no further than the southern regions of Asia Minor, or, at most, the eastern borders of the Ægean sea. Some are of opinion that the line was deflected into the island of Cyprus, and there terminated so far as its westward progress was concerned. Still another class of inquirers hold that the Hamitic progress extended westward through the Ægean archipelago and into Southern Greece. This view of the case makes the Pelasgians, to whom considerable space was devoted in a chapter of the preceding book, to be the descendants of the Hamitic stock. It will be remembered that the view of a northern, that is, a Thessalian, origin for the Pelasgic race was advanced in the former account of that people. This view of the case is not fully established. Nor can it well be said that the opposite opinion, namely, that the Pelasgians came from the archipelago into Argolis, and thence continued their progress to the West, is more than tentative.

Winchell's views regarding the European dispersion of the Hamites.

Winchell, in his *Chart of the Progressive Dispersion of Mankind*, holds to the view that the Hamitic migration was carried through the southern parts of Asia Minor, and thence by the Cyclades into Peloponnesus. From Southern Hellas this distinguished ethnographer extends the Hamitic line first into Northwestern Greece, where, in Epirus, as we have seen, one of the principal Pelasgic developments occurred. But the main line is carried across the Southern Adriatic into Italy, whence one branch is turned to the left, to furnish an aboriginal stock for the island of Sicily, while the other line bifurcates on the two sides of the Apennines, giving in Central Italy an origin for the prob-

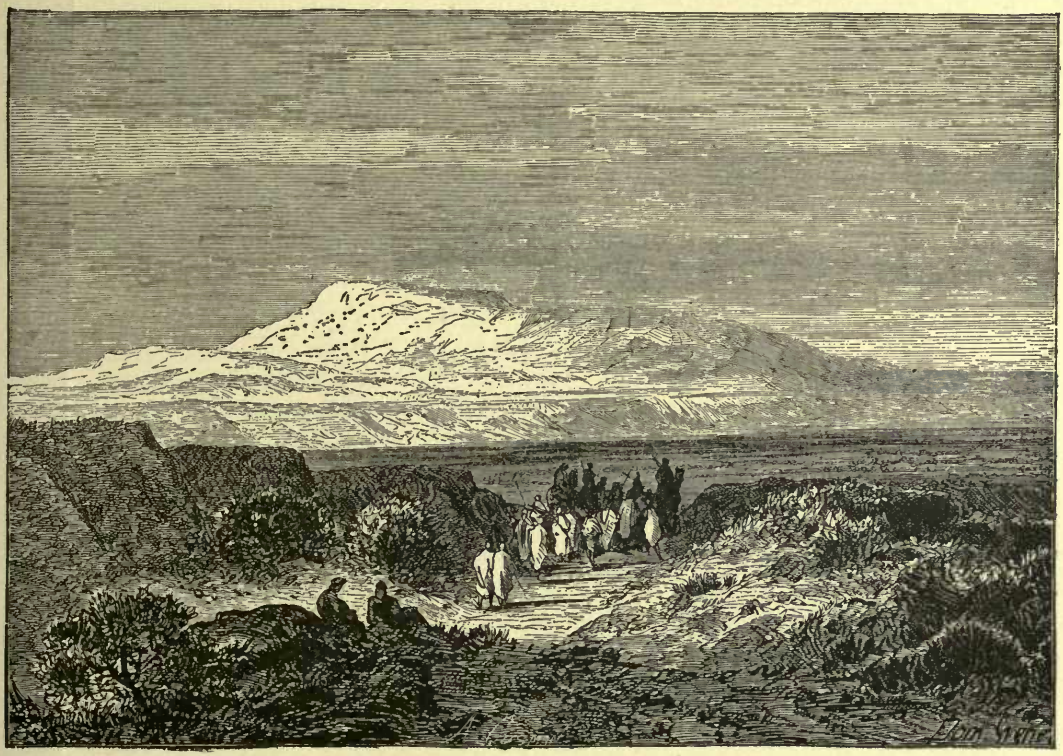
lematical Etruscans and their primitive development. It may be possible, even probable, that this scheme furnishes the best solution as to the race-origin of the first peoples of the Ruddy race in Southern Greece and Central Italy. If so, we may regard the valley of the Po, the inland region of Etruria, and the remote parts of Sicily as the westernmost limits of the European excursion of the Hamitic race.

We now turn to the central progress of the same race to the west. From Syria, the Hamitic movement continued directly through the isthmus of Suez into the valley of the Nile.

The race enters and occupies the Nile valley.

It has been believed by some historians that the invasion by which the aboriginal Egyptians were expelled from their country was carried, in part at least, across the Red sea into Central, or even Upper Egypt. But a better view of the whole subject shows that if any such race movement occurred it was of a later, and perhaps a Semitic, origin, from Arabia into North Central Africa.

The original occupancy, then, of the Nile valley by the Ruddy races was certainly by the incoming of the Hamites, first into the eastern delta, and thence southward along both banks of the river to Upper Egypt. The progress of Hamitic civilization from the vicinity of Memphis and Cairo southward to its extreme limit at Elephantis has been traced by ethnographers and historians until its course and character are no longer doubtful. The oldest occupation was in that part of the delta lying next to the isthmus, and from hence the progress of the race was constant until the whole valley was populated by tribes of a common descent.



ROUTE OF THE HAMITE MIGRATION, NEAR SUEZ.—Lake Timsah.—Drawn by Dom Grenet.

The account of the original dispersion of mankind may well pause at this point, that the attention of the reader may be once more called to *the extreme antiquity* of the movements here described. It is worthy of special note that the civilization of Egypt tended, in virtue of its own character, to transmit better evidences of time-relations and the succession of events than that of any other country. One of the fundamental ideas of the civilization created in the Nile valley was architectural grandeur, and closely connected with this was the notion of perpetuating the records of human life by means of colossal tombs and imperishable inscriptions. Fortunately the granite quarries of the country, especially in Central Egypt, gave opportunity to gratify this disposition, if indeed the presence of such materials did not first provoke the habit. The peculiar priestly organization of the race, in close union as it was with the secular dynasty, also tended to the creation and preservation of records.

Extreme antiquity of ethnic movements here described.

From these circumstances the great antiquity of Egypt became a marvel to the earliest historians and travelers of other races. No doubt the Egyptian scribes profited by the credulity of the age in which they flourished, and enlarged as much as possible the ancient records which they possessed. When Herodotus came into the country, about the middle of the fifth century B. C., he was shown the records of the old dynasties, from the founding of the first by Menes down to the reign of Seti. From this scheme he made up his estimate of the antiquity of the nation, producing as a result something over 12000 B. C. as the epoch of Menes. Four centuries afterwards, when Diodorus traveled in Egypt, he also studied the records of the country, and made out the founding of the first dynasty to have been more than twelve thousand years before the common era. According to Manetho, a native historian, the span between Menes and our era is reduced about one half, the accession of the first dynasty being fixed at about 5706 B. C.

Old travelers marvel at the age of Egypt.

The mediæval historians did nothing with the question, but in recent times many learned inquirers have taken up the subject, and the result has been the almost concurrent agreement of modern scholars that the epoch of Menes, founder of the oldest dynasty, goes back to the year 3892 B. C. This date is now accepted as approximately correct. Indeed, it appears to be rather within than beyond the true limits. Meanwhile a fact in astronomy has thrown perhaps the strongest light on the true era of the founding of Egyptian nationality. By the rate of the great movement called the precession of the equinoxes, it is now known that the equator of the heavens accomplished on the ecliptic a complete circuit in about twenty-five thousand years. It is also known that a certain star, which was polar at the time of the building of the oldest pyramids in Lower Egypt, has been, at the present time, turned by torsion just about one fourth of the way around the circuit of the heavens. This would imply the lapse of a little over six thousand years since the construction of the first pyramids; and the date indicated would be somewhat more than four thousand years before the common era.

Modern inquiry fixes approximate date for Menes.

It is safe to fix upon this date as a fair approximation for the time of the incoming of the tribes and the beginning of the great architectural era of the Hamitic race in Egypt. And it will be

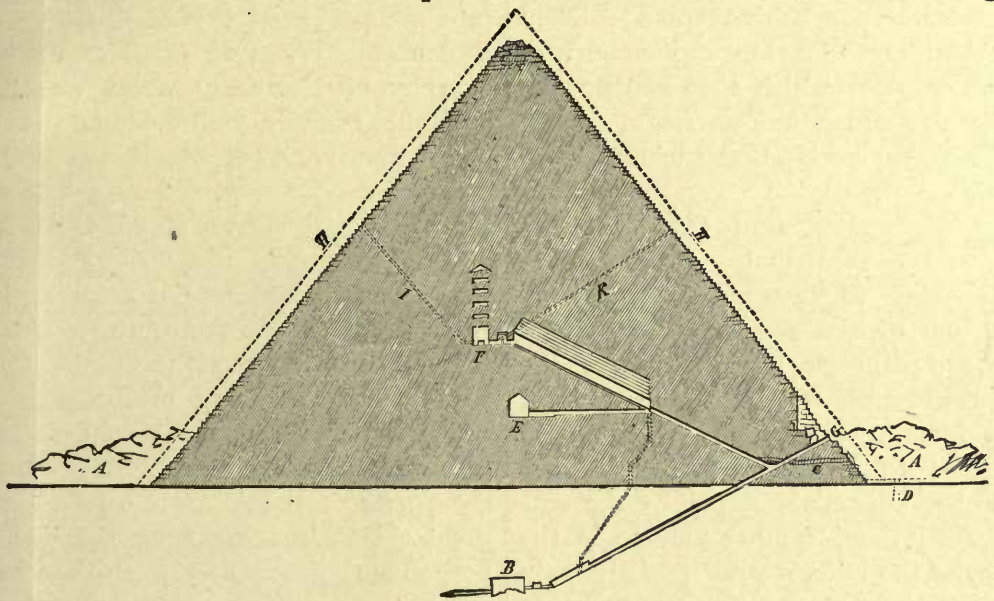
remembered that the ethnic movements which have furnished the subject-matter of the preceding paragraphs belonged to *a still earlier period* in the history of the race; all of which facts tend most strongly to emphasize the necessity of a great extension and widening out of the whole scheme of ancient chronology.

It is difficult for one removed to modern times and distant countries to realize the nature and method of the ethnic migrations of antiquity. It is not purposed in this connection to attempt to depict the actual manner of tribal removal from place to place to final settlement. One great feature, however, of the migratory progress of ancient peoples was the alternate speed and cessation of the movement. Sometimes the migrating horde would pour along like a swift stream, traversing in a short time vast stretches of country. Such was the rate of progress in desert regions and in mountainous districts where the means of subsistence were scattered and hard to obtain. But ever and anon this rapid volume of the moving race, most rapid in the vanguard, would flow into a region which, from its geographical situation and its fertility, would invite to settlement. Here there would be a pause. The tribe would spread over the surface of the country like a lake of water running into an inclosed lowland.

True nature of primitive tribal migrations.

For a long time the incoming tribes would pour along and discharge their volume into the reservoir. If the situation were sufficiently auspicious, there would be, in a short time, the beginnings of a national development. The more conservative elements of the tribes would establish themselves on the soil. Hunting would give place to the pastoral pursuit, and the pastoral pursuit to agriculture. Permanence would assert itself, and vacillation cease. Institutions would soon be planted. Architecture and the other practical arts would arise, and society would emerge from the tribal chaos which had preceded it.

In what manner favored localities become populated.



VERTICAL SECTION OF THE GREAT PYRAMID FROM SOUTH TO NORTH.

A, débris; B, vault; C, passage of entry; D, abutments; E, chamber of the queen; F, chamber of the king; G, ancient entrance; H, primitive facing of granite; I, K, ventilators.

Into such situations, however, a restless element is always poured, along with the calmer varieties of humanity. This radicalism would first flow to the furthest—generally the western—limit of the locality. Ere long, dissatisfied with the situation and longing for the old tribal freedom, these elements would burst away from the restraints of the civilizing communities and resume the migratory habits of antiquity. They would draw after them all adventurers, all the unprosperous parts of the half-formed societies behind them. They would strike out into new regions, driven by an impulse which they had no disposition to understand or check.

The radical element breaks away from the conservative.

We may conceive that ancient Egypt furnished one of the most striking examples of this *débouchure* of tribal waters. Here they were gathered, and here, out of the fecund soil, the elements of primitive life drew at first the means of subsistence and afterwards of development. How long the general progress of the Hamitic race to the west was checked and hindered by the outspread of the incoming volume in the valley of the Nile, it were, perhaps, vain to conjecture. For many centuries, no doubt, the outline was sufficient, and the auspicious character of the valley for succeeding ages appeased and satisfied the cupidity and restlessness of the immigrants.

Egypt a striking example of the ethnic sack.

In course of time, however, the more nomadic elements of Egyptian life climbed the western slope of the valley, and found the sand waste of Africa before them. Migration was resumed, and the first line of the new movement was stretched along the Mediterranean in the direction of Barca. It may be safely affirmed that the first tribes which were dropped into permanence in the country west of Lower Egypt were the ancient Marmaricans. It is well known that in after times Cyrenaica was colonized by the Greeks, but the primitive people whom they expelled from the coast and forced back into the interior were the descendants of the ancient Hamitic exodus from Egypt.

Migration at length resumed through Northern Africa.

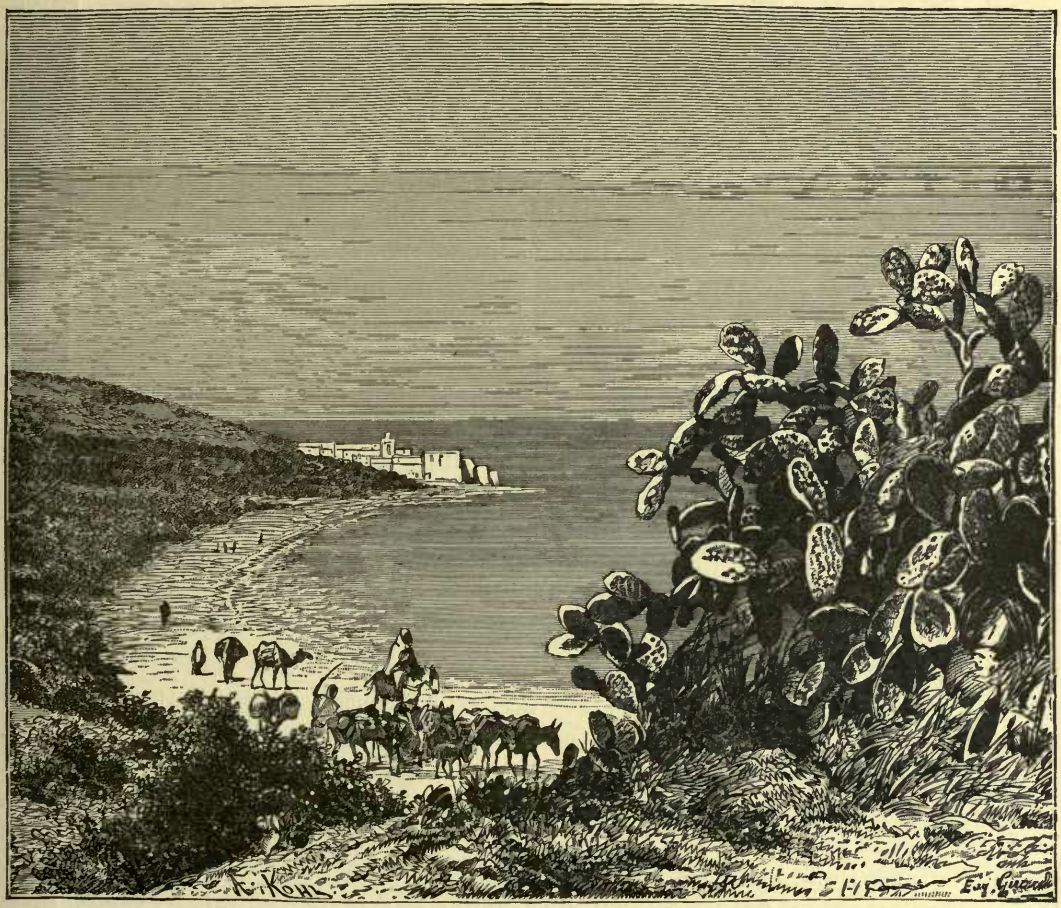
The main line of migration continued to the west, branching into the interior south of the modern Greek colony, and also turning into the peninsula toward Ptolemaïs. When we consider the geography of Northern Africa we shall find the country well adapted to the maintenance and perpetuation of such a movement. Throughout the whole extent of the region, from Egypt to the Atlantic, a mountain range of greater or less elevation defines the coast region from the desert to the south. Toward the eastern terminus this range is of slight elevation, being in the plain of Barca no more than a thousand feet in height. Toward the western extreme the peaks of the Atlas rise to a much greater elevation, reaching the line of perpetual snow. Throughout the whole extent the range approximates the sea, and the country between the mountains and the Mediterranean slopes down rapidly to the level of the ocean. It was through this region that the African Hamites made their way to the west, through Barca and Tripoli, into the ancient state of Africa Proper, and thence into Mauritania, and finally to the extreme west.

Branchings and turnings of the Western Hamitic dispersion.

This region, thus peopled in the prehistoric ages, became one of the most important of the subsequent historical countries. The ancient states along the southern shores of the Mediterranean

never attained—with the exception of Egypt—the power and importance of those situated on the northern coasts, but they reached a considerable degree of development, and were able to compete with the Mediterranean peninsular powers for the mastery of the west. Fundamentally, the people of the North African provinces were Hamitic in their origin. It is true, as we shall see hereafter, that parallel streams of a different race descent were at a subsequent time led westward through the same region. But the Brown race division of mankind carried its migration toward the Atlantic on the *southern* slope of the North African mountains, while the Semitic stream flowed still further to the south. It may also be noted that the seafaring Semitic Phœnicians who passed westward through the Southern Mediterranean skirted the coast of Africa, and touched the islands rather than established colonies or built states on the mainland.

Rank and character of North African states and peoples.



TUNISIAN COAST.—Gulf of Hammamet.—Drawn by Eugene Girardet, after a sketch of Saladin.

The main stream of Hamitic migration may be said to have reached its terminus with the Atlantic, or at least with the islands west of Morocco. It is believed that the original tribes inhabiting the Canary islands were the westernmost dispersion of the human race, so far as the Hamitic migration from the east was concerned. As a rule, the Hamites no-

The Hamites venture by land, but avoid the sea.

where took to the sea. They were a land people, and while preferring the coast regions of the ancient world, they avoided the open ocean and formed very few insular settlements. They had far less dread of the perils of the desert than of those peculiar to the deep. An examination of the movement of the race westward through Northern Africa will show a much greater number of tribal departures toward the south than toward the north. The inviting character of the Mediterranean islands seems to have appealed less strongly to the people of this descent than did even the desert wastes of Sahara.

It is possible that the Hamitic movement, considered as a whole, was somewhat determined by latitude and temperature. The race appears to have had a preference for the southern climates. If we consider the central line of migration from the original seat of the race to its extreme western limit in the Canaries, we shall find only one or two considerable developments toward the north. The whole expansion of the Hamites was in the direction of the equatorial regions. If we allow the Pelasgians and the Etruscans to have been of this descent, we shall find this single stream to have attained a northern limit of a little more than forty-five degrees, in the valley of the Po. Otherwise, the northernmost deflections were scarcely above thirty-five degrees north. The main line of westward population was about the parallel of thirty degrees, and from this line nearly all the departures, both in Asia and Africa, were to the south and southwest. From the main course, the various tribal migrations into the regions of the equator and their ramifications filled a considerable portion of the old countries from the Persian gulf to the Atlantic south of the thirtieth parallel and north of the equator. None of the Hamites crossed the equatorial line southward in their original dispersion, the nearest approach thereto being made by the Galla tribes of Eastern Africa.

Hamitic preferences for the equatorial trend.

Among these various lines of southern deflection, the two principal were, first, the great Cushite departure into Southeastern Arabia and Eastern Africa; and secondly, the West African division, which left the parent stem on the borders of the Libyan desert, in the modern state of Algeria. From this point the secondary current turned to the southwest into the Moorish states and again divided in the Sahara, one stream continuing the original course and the other bending back toward the east, forming a loop whose southern line reached nearly to the parallel of twenty degrees north. It was thus that the aboriginal population of the Moorish and Berber states was supplied. Here sprang the desert people of the African waste, and from this source have been derived at least a majority of all the Berber, Tuareg, and Imoshag nations.

The Berber races result from deflected movements.

In following the course of the Hamitic progress toward the Atlantic, the ethnographer meets some peculiar difficulties. The ethnic classification of the Carthaginians has been the source of much perplexity; and there are even yet unsolved elements in the problem. By language and many of their institutions the ancient Carthaginians seem to have been closely allied with the Semitic races of the Orient. Tradition has distinctly and emphatically assigned to them a Phœnician origin. Many ripe scholars have not hesitated to classify them as Semitic.

Ethnic place of the Carthaginians considered.

In the first place, it must be remembered that the institutions and languages of the Hamitic race were by no means clearly separated from those of the Semites. Linguistically and institutionally, as well as ethnically, these two branches of the human family appear to have hung together until the forms and characteristics of each had to a considerable degree become fixed by development. The selvages, so to speak, of the various Hamitic and Semitic migrations lay together and overlapped each other in a measure that could not be expected in the case of the Aryan nations. For these reasons, identities and analogies of language and of institutional forms of both public and private life are abundant between the earliest Hamitic and Semitic nations. The Phœnicians were doubtless in the first place Hamitic in their origin. With the Semitic conquest of Canaan, that race became dominant to the sea. To what extent they were modified in their Phœnician development by Hamitic Canaanites it were impossible to tell, but doubtless the more recent Phœnician character was in its ethnic origin the product of both elements.

Institutional and linguistic intimacy of Semites and Hamites.

Moreover, in this region, the common forms of the two races were especially abundant. So if we consider the Phœnicians in the act of colonization in the west, as at Carthage, we shall find them planting on that shore *a mixed race* in which the oldest blood was Hamitic, and the more recent Semitic, in its derivation. Again, the later commercial relations of the Phœnicians brought many of their merchants and not a few Eastern institutions into the mart of Carthage. If, then, we look at the Carthaginian state, particularly at the city, in the time of its ascendency, we shall find a people marked in all of their civic and private life with the unmistakable traces of Shem. But it need not be forgotten, at the same time, that the westward progress of the Hamites along this coast must, almost of necessity, have furnished the aboriginal element and germs of all the states primarily

Semitic influence prevails over the Hamitic at Carthage.

HAMITIC TYPE OF THE UPPER NIGER—BAMBARRA.
Drawn by Riou, after a sketch of Valliere.

created between Egypt and the Pillars of Hercules.

Continuing the course of Hamitic migration in the west of Africa, we find the main line of progress passing to the south from the Moorish states across the twentieth parallel and into the more habitable countries of the Upper Niger. Here there was another bifurcation, the western branch reaching out to the coast and furnishing the original elements of the Fulah tribes of Western Guinea. This was the second extreme limit in westward extent of the Hamitic migrations, being almost as far in that direction as the Canary islands. The other branch of the race appears to have turned eastward in the lake region of the Upper Niger, and to have thence descended the valley of that river into the Sudan and as far east as the country drained by the streams which flow into lake Chad. It is likely that the Baghirmi nations, lying southeast of the lake just named, mark the remotest point to which the original impulse carried the race of Ham into Central Africa.

Extreme limits of Hamitic distribution in the west.

The whole course of the migration, considered from the standpoint of Lower Egypt, resembles a fishhook bending southward around the larger part of the desert region of the African continent and presenting an interior and an exterior line, the latter of which reaches back toward the country of the original exodus, about one half way from the western coast of the continent to the Red sea. The final distribution of tribes, by means of this great migration in the prehistoric ages, was in a region of Africa into which the Black races, coming from the east, had already been poured, and with which the Hamitic peoples have in all subsequent ages been intermingled, until it were difficult, if not impossible, in modern times to discriminate the diverse race elements in the peoples of this region.

Nature of the dispersion in African interior.

This, then, concludes the summary of Hamitic migrations in Southwestern Arabia and Northern Africa. No doubt all such movements are more clearly drawn, more definitely indicated, in discussions of the kind here presented than they were in fact. In the physical world nature abhors a line, and the same may be affirmed with emphasis of the movements and phenomena of the world of life. Of a certainty, tribes migrate from place to place. They flow here and there into favorable localities, and there possibly develop into nations. But the movement *is not so exact and logical* as it appears to be when viewed through the medium of description. There is, on the contrary, much that is desultory and irregular in the course of migration from one country to another. Much allowance must be made for delays and deflections, and still more for the intermingling of one tribe with another on the way. The incoming people frequently disperse themselves among the original inhabitants, and are mixed with them in the race development of the future.

Ethnic movements are not exact and logical.

In some cases the migration is more exact and definite, and in such instances the facts correspond more nearly to the concept of the movement as it is transmitted by description. In the case of the Hamitic dispersion over the countries to which we have referred in the current chapter, it must be constantly remembered that these people were not so different typically from their Semitic kinsmen as the latter were from the Indo-European races. From this source

General summary of the Hamitic migrations.

also much confusion has necessarily arisen in the attempted classification of these people by their ethnic affinities. But it is believed that, on the whole, the Hamitic race took in prehistoric times the general lines of distribution which are here indicated; that it was distributed first into Southeastern and Southern Arabia, then into the western portions of the same peninsula, and then into Canaan. From this position the lines of migration part around the Mediterranean north and south, the lower departure being into Egypt, and afterwards into Northern Africa. In the course of ages the movement continued to the west, along the southern shores of the Mediterranean, to the Atlantic, and was thence deflected to the south into the equatorial regions, and finally turned back into the desert wastes covering the central and north-central parts of the continent.

It is not intended in this connection to trace further the historical development of the various peoples who sprang up on the line of these migrations. That part of the work will be attempted in another book. For the present, we turn from this cursory outline of the Hamitic distribution of mankind to consider another of the great primitive races in its similar dispersion, first through a great part of the Orient, and afterwards into different parts of the Western continents.

CHAPTER XXVI.—MIGRATIONS OF THE SEMITES.

ROUGHLY considered, the great monarchies in the valleys of the Euphrates and the Tigris were planted and developed by people of the Semitic race. It was in Mesopotamia that the first striking evolution of this branch of mankind was manifested. This is said of civil and political expansion, and of the establishment of social and linguistic forms. It is here that ancient history finds its first great buttress against the unknown. If we look at the upper part of the valley, below the Armenian mountains on the north and the range of the Zagros on the east, we find a region in which Semitic elements followed their natural course of evolution and were unadulterated by foreign nations. In the south of Mesopotamia, as we have seen, there was a mixture with the Hamitic stock. But in the later Babylonian aspect of these nations the influence of the Hamites had waned to such an extent as to leave the Semitic races dominant throughout the whole region drained by the great rivers.

Mesopotamia essentially a land of the Semites.

We have already noticed the fact of the prevalence of this division of the race in the Tigrine and Euphratine valleys. It remains in the present chapter to take up the course of Semitic life and follow it on its migration into western lands. For a long time after their departure from the Mesopotamian regions the different branches of the traditional Noachite descent were held well together by the geographical environment. On the whole, the Semitic stock was central in its movement to the west. The Syrian desert was entered from about the middle of the valley of the Euphrates,

Central position of the race; the westward movement.

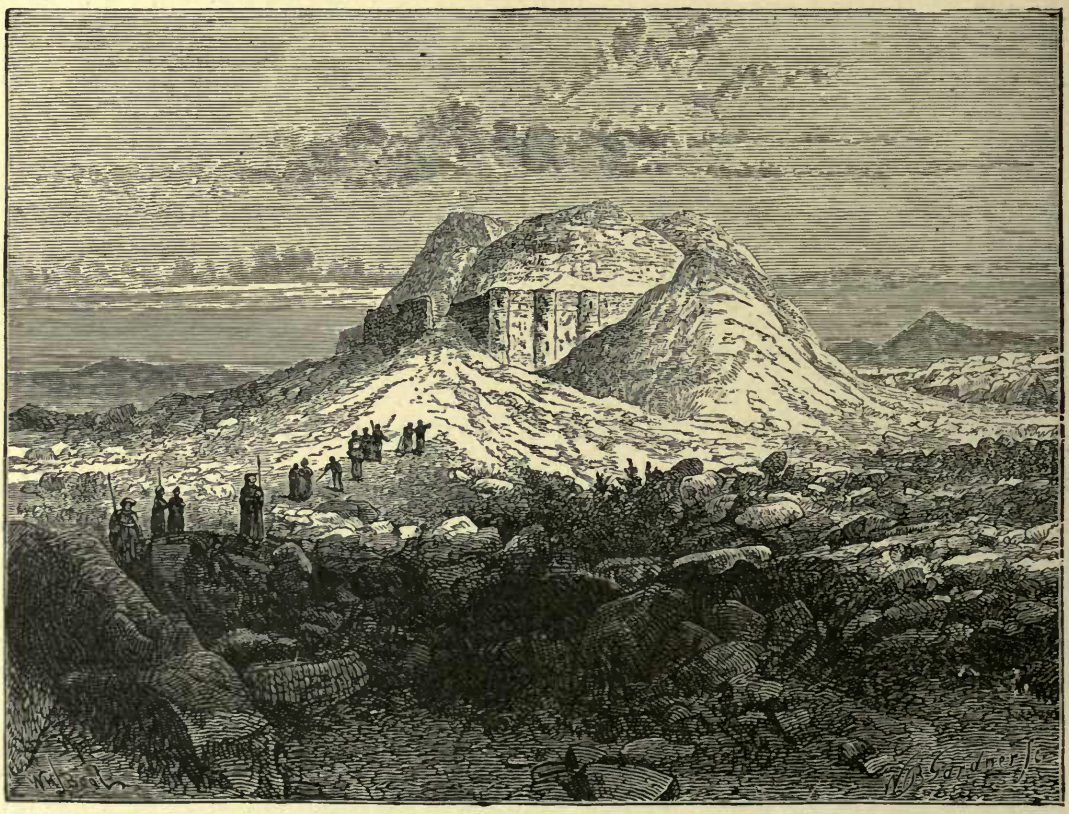
and was traversed by the migrating family directly into Canaan.

It is here, moreover, that the ethnographer, in his attempted delineation of the prehistoric movements of mankind, is reïnforced by tradition. One of the oldest and most authentic of these is the story of the migration of Abraham from Ur of the Chaldees into Canaan. This, viewed from the Semitic standpoint, is one of the most famous movements of the early world. The tradition of it exists among all the cognate races of the Hebrews, and with themselves it is the virtual founding of their race.

Tradition of the outgoing of the Abrahamites.

The position of Ur in Mesopotamia is well known. It is identical, in site at least, with the extensive ruins about six miles to the west of the Euphrates and nearly opposite its junction with the Shat-el-Hie. The place is called Mugheir, meaning "supplied with bitumen." The outline of a most ancient temple is still discoverable in the place; and the plan of the foundations, and indeed of the whole structure, has been made out by Rawlinson and other Oriental scholars. It was from this vicinity that the Abrahamic tribe took its way, first ascending the valley of the Euphrates for a considerable distance, and thence traversing the country into Canaan.

Place and character of Ur of the Chaldees.

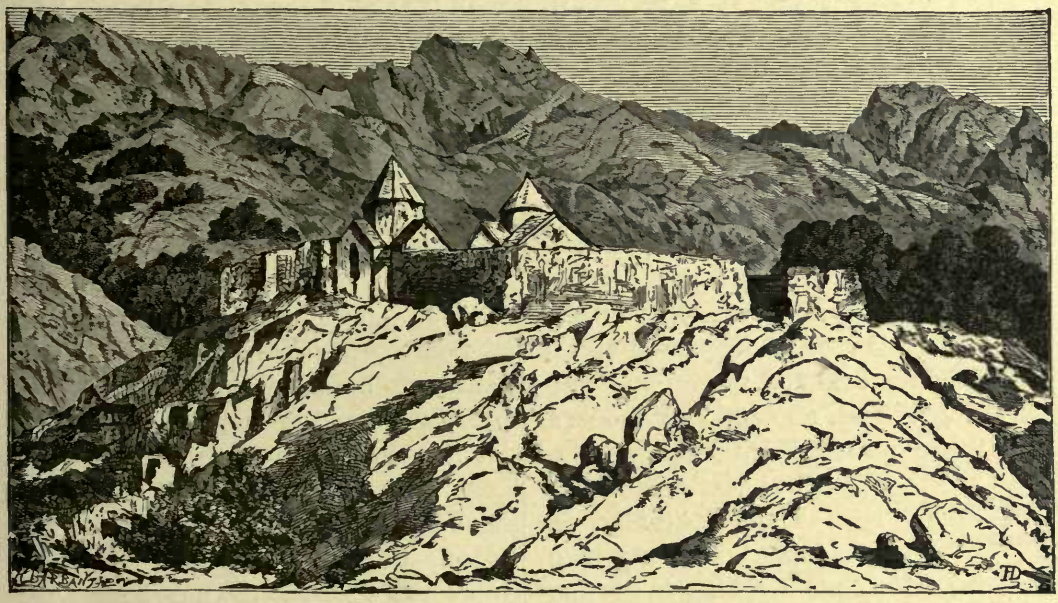


RUINS AND PLAIN OF MUGHEIR.—Drawn by W. H. Boot.

All, or nearly all, the names that have been preserved to us of this period are significant of tribal movements. Eber, the ancestor from whom the name of Hebrew is taken, means "from beyond," that is, he was an emigrant from beyond the Euphrates, perhaps the

Special significance of the Semitic patronymics.

Tigris. The name of his elder son, Peleg, signifies "division," "because in his time the earth was divided." The name of Salah, the father of Eber, signifies "departure," and evidently refers to a title which that patriarch received in departing, or setting out, with his tribe for a new home. Everything pertains to migration. If the meaning of the name Arphaxad has not been ascertained, the position of his tribe at least is known. Arphaxad is a mountain district of Southern Armenia, between lakes



LAND OF THE ARPHAXAD.—VIEW OF KOPANS KALE.—Drawn by T. Deyrolle, from nature.

Van and Urumiah; and there is no doubt that the primitive clan of this ancient Semite had its original locus at this place. Nahor, the son of Serug, means "the river," that is, the Euphrates—and so of scores of other proper names referring to Mesopotamian localities or to family or tribal movements in that region.

Contact of the Abrahamites with the races of Canaan.

The pastoral picture which is drawn in Genesis of Abraham on his way to the Promised Land, and of the troubles which beset him on his journey, of his contention with his kinsman Lot, and finally of his really serious battle with Chedorlaomer, or according to the Assyrian spelling, Kudur-Lagamer, is sufficiently striking and impressive. Kudur-Lagamer was king of Elam, or rather the Elamite king of Chaldæa, and had followed the Abrahamic tribe out of the East, with the hope of falling upon it and gathering great spoil. There is little doubt that this Elamite dynasty in Chaldæa was of Hamitic origin; and the departing Abraham was thus the object of race antipathy, as well as the possessor of flocks and herds. According to the Hebrew account of this migration, which was the origin of Israelitish greatness in Palestine, there was a division of the family which appears to have been on the borders of Canaan, about the time of the invasion. Ishmael, the oldest son of the patriarch, had married an Egyptian bondwoman and had become the head of a tribe. The troubles arising out of this heathen alliance led to a separation of the families, and Ishmael was carried off into the south, into Arabia.

Several generations before this time, however, another branch of the Eberites had already made a departure into Arabia. This movement was made by Iaktan, or Joktan, his elder brother being that Peleg who was the ancestor of the Abrahamites. Joktan was thus five generations before the patriarch of Israel. A large list of twelve sons and a daughter are assigned to Joktan as the heads of the tribes which he led off into Northern and Western Arabia.

Outgoing and plantings of Joktan in Arabia.

The movement was at a very early date. Joktan was the great grandson of Arphaxad, and the latter, as is well known, belonged to the extreme north of Mesopotamia, in the mountainous region of Armenia. So the Joktanites must have been strongly in the migratory spirit. Eber, the father, had come "from beyond." Salah, the grandfather, was the "departer." It is thus evident that the whole race of Arphaxad was in process of removal and migration.

Ethnographers, ancient and modern, have made out and identified several of the tribes having their origin in the Joktanian descendants. Ptolemy mentions the Almodœci dwelling in the central portions of Arabia Felix, and it can hardly be doubted that the name is derived from Almodad, the oldest son or tribe of Joktan. Another people called the Salapeni by the same geographer, are thought to have been derived from Sheleph, the second son of the same patriarch. This branch of the race was set down by Ptolemy as having its abode near the modern Mecca. A third division called the Cathramitæ were presumably the descendants of the third son of Joktan, named Hazarmaveth. It is likely that the modern provincial name of Hadramaut preserves the reminiscence of the original Semitic tribe by whom this region was peopled. There is also a modern tribe called Yarab, having its territories on the Arabian-gulf border and thought to have been descended from Jerah, the fourth division of the Joktanian progeny.

Modern traces of the ancient Joktanians.

The Semitic inhabitants of Yemen are believed to have descended from Uzal, sixth son of Joktan. The Himyaritic tribe, called the Dulkhelitæ, are believed to be the descendants of Diklah, the seventh branch of the original family. The tribe called Mali by Theophrastus, the Malichæ of Ptolemy, stand for the descendants of Abimael, the ninth Joktanian. The name of the modern town Malai, in the vicinity of Medina, preserves the same word. The tenth issue of Joktan was that Sheba, which is mentioned in the Hebrew writings and still more frequently among the local names of Southwestern Arabia. The eleventh Joktanian branch was called Ophir, and preserves another name famous in the Hebrew writings of the time of the kingdom of David and Solomon. It is believed that Havilah, a name common to one of the descendants of Ham, is represented by the modern Semitic people at Chaulan, in Arabia Felix. The tribe of the Iobaritæ, mentioned by Ptolemy, have their ancestral representative in Iobab, or Jobab, the thirteenth member of the Joktanian tribe.

The Joktanidæ make themselves names and races.

We thus see, with more than usual certainty, considering the extreme remoteness of the time, the outlines of a distribution of Eberites into Northern and Western Arabia. If we accept the extreme longevity assigned by the sacred writings to the patriarchs of this era, we shall find that the six generations between Joktan and Ishmael would cover a

Relations of the Joktanians and the Eberites.

period of thousands of years. However this may be, it can not be doubted that the Joktanians departed from the parent stem at a date much more remote than the more recent Abrahamites, and that when Ishmael, with the descendants of the Egyptian bondwoman, turned off into the "wilderness," he found already in Arabia Felix the half-nomadic and half-settled descendants of the older branch of the Eberite race. It will be borne in mind, however, that the progeny of Joktan, the younger brother of Peleg, would be displaced in rights and prerogatives by the descendants of the senior branch of the family; so that the Ishmaelites would have precedence in these regions as the representatives of the common father Arphaxad. The accompanying diagram will illustrate the tribal relationships of the descendants of the Joktan and the Ishmaelites:

Ishmaelitic migration was from the borders of Syria to the southwest and thence to the south, until the coast of the Red sea was reached, and skirted southward to the extreme limit of that body of water. If, as some ethnographers maintain, the Semitic race crossed at Bab-el-Mandeb into Africa, it was an Ishmaelite removal, and whatever elements there may be of Semitic descent among the Galla races of Eastern Africa, the same must be traced to Ishmael rather than to the Joktanian branch of the original Semitic family.

The western branch reaches the Imoshag in Africa.

In the course of their progress through the peninsula, the Ishmaelites appear to have divided east and west about the eastern border of Hejaz, and to have thrown off one branch toward the central desert and another across the Red sea into Africa. This latter movement of the race must not be confounded with

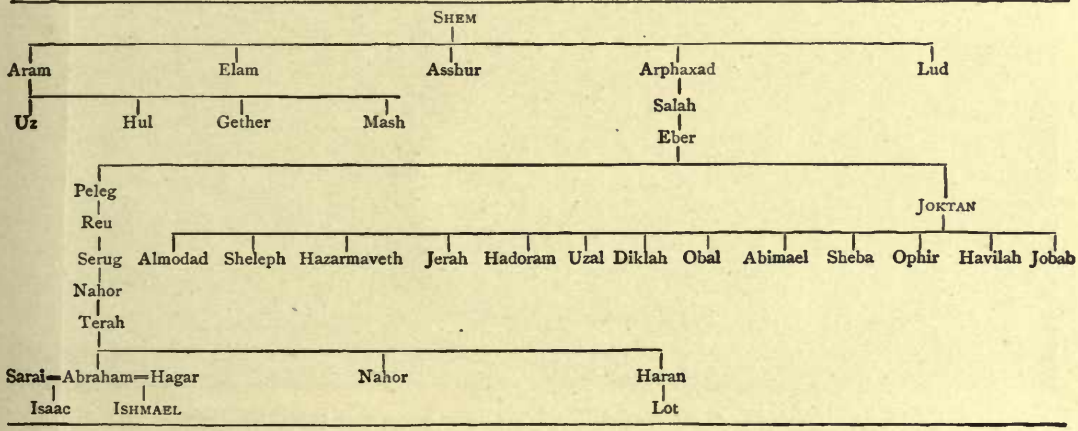


DIAGRAM SHOWING TRIBAL RELATIONSHIPS OF JOKTAN AND ISHMAEL.

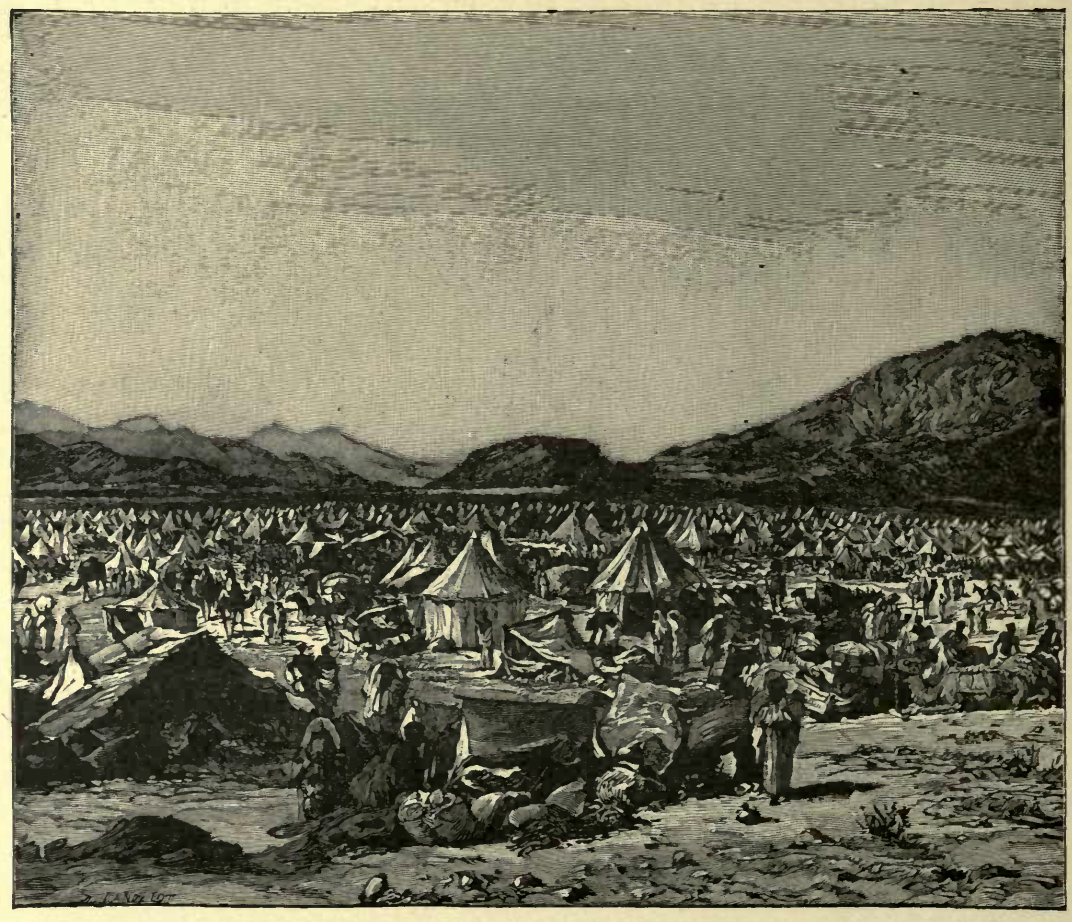
Spread of the Ishmaelites through Arabia.

The career of the Ishmaelites in Arabia was one of aggression. They encroached, especially in the northern part of the peninsula, upon the older Joktanians and also upon the original Hamitic Arabians, who were anterior to both branches of the Semitic immigrants. In general terms, the course of the

the supposed one at the southwest angle of the peninsula. The real Semitic line was carried into the continent about the parallel of twenty-four degrees north, across Middle Egypt, and almost directly west into the Great Desert. The migration of the Ishmaelites in this direction appears to have extended as far as the Imoshag races, to the southwest of

Fezzan; and this point may be regarded as the extreme landward progress of the Semitic race south of the Mediterranean.

In general, the modern Arabs are regarded as the lineal descendants of the Ishmaelitic branch of the Semitic family. In the main, this opinion is verified by the facts in possession of the ethnographer and historian. But the Arab character is, to a considerable extent, composite. Several ethnic elements have contributed to its formation. The Hamitic race, especially in the southern part of the peninsula, underlay the national development of subsequent times. With this oldest stock was blended to some extent the Joktanian influence of later ages. Finally, in the north and west of Arabia, the immigrant Ishmaelites overcame and subordinated all the peoples that had previously occupied the country. The antipathy between Shem and Ham, however, was never great—except in matters of religious dogma and ceremonial. For this reason the original inhabitants, already a composite people in Arabia Felix, may be supposed to have contributed not a little to the ultimate formation of that type known in modern times as Arabian. But the dominant stock, at least in the important regions bordering the Red sea from Suez to Yemen, was Ishmaelitic in its origin and development.



ARAFAT DURING A PILGRIMAGE (LAND OF OPHIR).—Drawn by D. Lancelot, from a photograph.

Composite race character of the modern Arabians.

We have thus considered the southernmost migratory movements of the Semitic race. The Abrahamic tribe entered and possessed Canaan. This movement of the principal stock, representative of the family of Eber, is better understood in its character and results than any other single migration at a time equally remote from the present. The story is elaborately expanded in the Book of Genesis. All the principal episodes in the career of the Abrahamic tribe are narrated, even to details. The patriarch became the progenitor of a famous race which he planted in Canaan. The extent and variety of his tribe are indicated by the conduct toward him of Melchizedek, King of Salem, and by many other incidents and events. A great development of the immigrant race took place in the time of Israel, grandson of Abraham, whose twelve sons became the progenitors of the twelve tribes and the origin of the twelve geographical divisions of the rising race. It is not needed to recount the episode of the sojourn in Egypt and of the rapid multiplication of the foreigners about Pelusium. The return out of bondage and the repossession of Canaan by conquest furnished the material for the heroic aspect and story of the Israelitish nation, which became dominant from the borders of the Syrian desert to the Mediterranean.

Vicissitudes of the Abrahamites in possessing Canaan.

It is worthy to be noted in this connection that the Hebrews were never a seafaring people. It was against the economy of the state, and regarded perhaps as injurious to the theocratic principle upon which the government was founded, to make commercial excursions and contract relations with foreign powers. A student of history will not forget that the narrow strip of coast called Phœnicia, with its great seaports, lay between

LIFE OF THE ABRAHAMITES—SHEPHERD WITH LAMBS.
Drawn by Paul Hardy.

Noncommercial character of the primitive Hebrews.

Israel and the Western ocean. This fact has an ethnic signification also; for the Tyrians and Sidonians and other old stocks of mankind, hanging in their rookeries along the eastern end of the Mediterranean, represented races long anterior in their western distribution and development to the immigration and conquest of Canaan by the Eberites.

In course of time the Semitic stock became dominant to the sea. But the spirit of navigation which prevailed in the ports of Tyre and Sidon must be attributed to a race impulse other than that of the Hebrews. To the extent that the Phœnicians had accepted the institutions and blood of the invaders who conquered Canaan, we may regard the outgoing fleets from these shores as carrying Semitic influences through the Mediterranean. But it is doubtful if these fleets of outbound merchants carried to the western parts anything *distinctively* Hebrew. All the traces of the Semitic race which have been found in the Mediterranean islands, on the shores of Spain, and beyond the straits of Gibraltar, in Wales, and in the littoral islands of Western Africa, must be attributed to that community of language and institutions which the Phœnicians, particularly the Sidonians, possessed in common with the race of Abraham.

Extent of Hebrew influence on the Mediterranean.

Time and again we have shown that the Hamites had common forms of language and a common institutional development with the cognate nations of Shem, and the original Canaanites could thus carry into western waters evidences of a race affinity with the dominant Semitic stock. However this may be, ethnographers have agreed in extending the Semitic line of dispersion through the Phœnician coast and around the northern shores of Africa by water. As just indicated, this line extends beyond the Pillars of Hercules, and is deflected northward to Britain and southward to the twentieth degree of latitude. The western limit of this maritime migration is thought to have been in the Azores; and this group of islands may be said to mark the extreme Atlantic progress in the natural dispersion of the Semitic family.

The Azores mark the Atlantic limit of Hebrew departure.

It must be noted in connection with the foregoing schemes of dispersion that most of the names employed appear as the names of individuals— as the sons of a household. This fact gives to the discussion a strictly *family aspect* which is too exact and too narrow for the facts which it represents. Many of the names in the above classifications are known to be the names of tribes and of whole divisions, or even of whole peoples. It is impossible from a study of primitive Semitic records to make out precisely which of the ancestral names employed in geneological tables are intended to represent single ancestors, and which are designed to specify households, tribes, and peoples. It is the custom in the Semitic languages to prefix to many personal names, especially such as have a descriptive signification, the definite article, thereby giving to the word an ethnic turn of sense different from what would be expressed in the Aryan languages. Such names, moreover, are frequently in *the plural;* and the Hebrew Scriptures, taken as an example of all such records, have, in many instances, intermixed these tribal or ethnic epithets with individual names until even the closest criticism is put at fault in determining precisely what is meant. On the whole, it is safe to make considerable allowance for this circumstance in estimating the value of the names, apparently individual, given

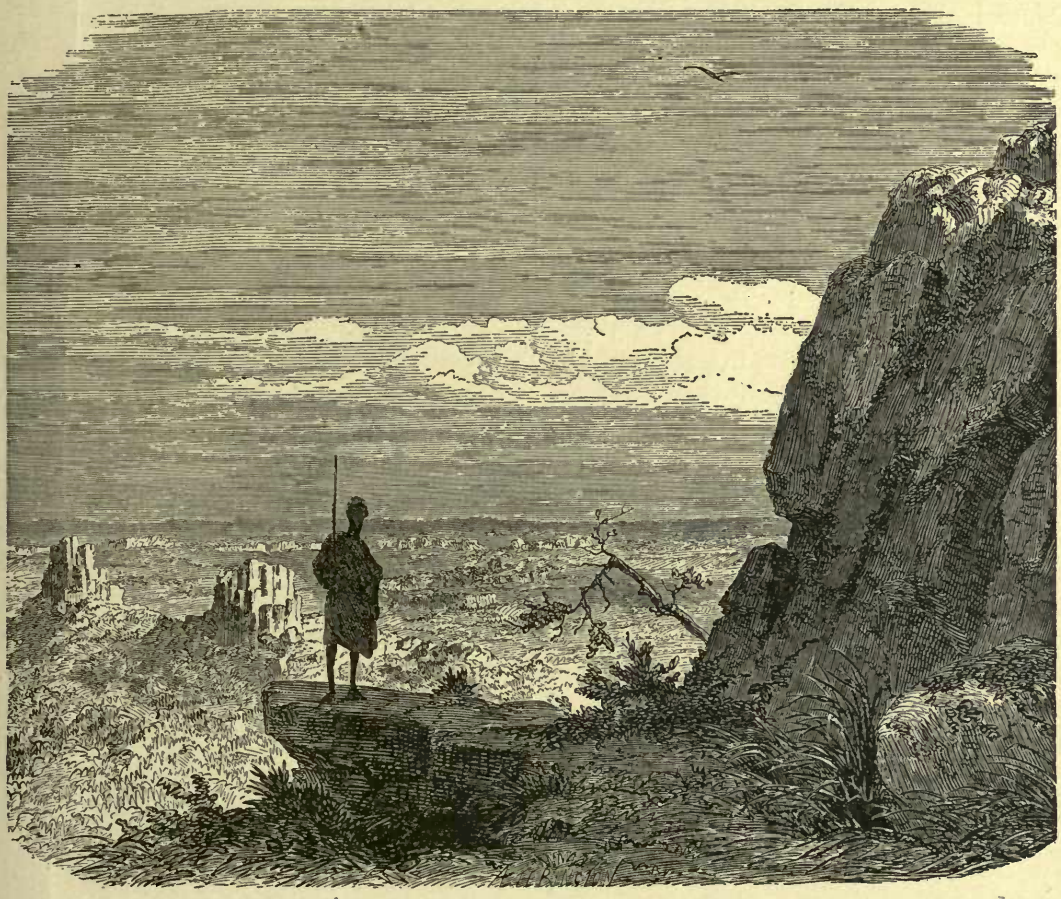
Use and significance of Hebrew tribal names.

to the ancestors of the Semitic and Hamitic races. This fact must always be taken into account in attempting to estimate the *time* and the *extent* of a given migratory movement.

If we look to the north of the central line of the Semitic dispersion into Canaan and the west, we shall find only a single significant departure. This leaves the main stem on the north in the Syrian desert, and bears off in the direction of the northeastern extremity of the Mediterranean, where it touches the coast, and is thence carried over to the island of Cyprus. It is hardly to be doubted that along the line of this migration other peoples had preceded the Semites, and it has already been suggested that in Cyprus itself the aboriginal development was of Hamitic origin. The primitive history of the island is exceedingly obscure, but all that is known with reference thereto points to an early colonization by the Phœnicians from the neighboring coast. The ancient worship of Ashtaroth in Cyprus seems to be identical with the corresponding cult in Phœnicia, and it may be concluded that the first race, by which is meant the first progressive race, in the island was of the old Canaanitish stock which fixed itself in the earliest ages along the eastern shore of the Mediterranean.

The Hebrew branch entwines with the Hamitic in Cyprus.

Such, then, is the general view of the dispersion of the Semitic nations.



"LAND OF THE SCORCHED FACES."—Abu Senoum, on Frontier of Kordofan, toward Darfur.—Drawn by Karl Girardet, after a sketch of Lejean.

Summary and outline of the Hebraic distribution.

Geographically considered, the race was narrow and intense. Its migratory excursions did not reach out so extensively as those of other peoples. The extreme western continental limit was, as we have seen, in North Central Africa. The southern departure dropped down as far as the limits of Arabia. The northern limit was the island of Cyprus; and the maritime expeditions—if we regard the Phœnicians as representatives of this race—extended through the Mediterranean and to a certain distance around the western coasts of Europe and Africa. Taken altogether, the dispersion is the smallest, that is, the most limited in geographical extent, of all the great ethnic departures. The dispersion of Japheth in comparison with that of Shem was, as we shall presently see, world-wide in its extent. But within the limited territories occupied by the Semitic race a very intense form of religious and civil development ensued, making the Semites conspicuous among ancient peoples for their peculiarities and persistence and force of character.

Question of the race derivation of the Ethiopians.

In the course of the current chapter little has been intimated relative to the primitive populations of Ethiopia. This name was given by the Greeks to the region lying immediately south of Egypt. The word means "the land of the scorched faces," and was doubtless applied by the Hellenic ethnographers to the Ethiopians on account of their swarthy hue. This, however, by no means implies that they were a branch of the Black races of mankind. It is well known, on the contrary, that this people were allied with the Hamitic and Semitic families of men, and not with the Negroes or Hottentots.

Western Ishmael combines therein with the Hamites.

The early history of Egypt indicates close relationship between that country and Ethiopia. At one epoch an Ethiopian dynasty is found in the ascendant in the Nile valley. There was much community of religions and of civil institutions between the two peoples, who, however, frequently went to war. To what extent, in the prehistoric ages, the Hamitic race had made its way up the valley beyond the falls of the Nile and contributed a first population to Ethiopia can not be well ascertained. But that the original race of this region was at least to some extent Hamitic in its origin can hardly be doubted. We may, nevertheless, accept the current view of ethnographers that the western division of the Ishmaelites crossed the Red sea and gave a Semitic character to the first Ethiopian tribes. It is possible, moreover, that the same race, after making its way to the southern extremity of the Red sea and passing thence into Africa, doubled back into Ethiopia and disseminated certain tribal elements in this obscure but important region of the earth.

Aram the seat of the strongest Semitic development.

We thus note three great divisions of the Semitic stock. The primary departure sent off the Aramaic branch of the race. In general terms the people of Aram, known ethnically as Aramæans, were distributed from the Zagros and Kebir Kuh on the east, to the borders of Canaan on the west. Aram embraced all of Mesopotamia except Chaldæa, subsequently known as Babylonia, and all of Syria in the west except Palestine and Phœnicia. The seat of Aramaic culture was Mesopotamia. Here was exhibited the strongest development of the race. Geographically, Aram was the northern division of the Semitic family,

as the Hebraic stock was the central and the Arabic division the southern evolution of Shem.

In considering the race characteristics and historical progress of these peoples, we shall have occasion to revert to this division of the Semitic family, and to make the same the basis of a discussion of the national life of the Mesopotamian nations, the Hebrews and the Arabs. We turn, then, in the next place, to a discussion of the far wider, and in many senses more important, development of the oldest branch of the Noachite family of mankind—the Aryans, or Japhethites.

CHAPTER XXVII.—THE EAST ARYAN DEPARTURE.

THE dispersion of the Japhetic, Aryan, or Indo-European race—for the three ethnic names are virtually synonymous — constitutes the most picturesque chapter in the prehistoric annals of the world. We are brought in the investigation to what appears to have been an inexhaustible fountain of human life, and are led to view the issuance from this common source of at least six of the great races which became in their development the principal historical forces in the ancient world. It will be of primary interest in this inquiry to note, first of all, the geographical location of this common fountain wherefrom issued the best, or at least the strongest, peoples who have, by their energy and genius, transformed the primeval world into its present civilized and auspicious condition.

Determination of the origin of the Aryan migrations.

With the map of Asia before him the student need not be long in fixing the great ethnic center which we are about to consider. Regarding the ancient country of Carmania as the seat of the Noachite division of peoples, and fixing the line of Japheth on the north, it may be easily perceived that its westward-bearing course would come against the Hyrcanian mountains and the Lower Caspian, and be deflected or doubled back toward the Upper Oxus into Margiana and Bactria. It was in this region that the great ethnic whirl was established, where the Aryan race seems to have found itself turned by torsion for a season under the dominion of cosmic forces, which it were, perhaps, vain to attempt to analyze and define.

Ethnographers have differed somewhat as to the true seat of the great races which we are now to consider. The better opinion places the center of the distribution about the Lower Caspian, or eastward toward the borders of Bactria. It is likely that the rapidly multiplying race covered geographically the larger part of the country between the Bactrian borders and the Lower Caspian. At least this is the general locality from which the most powerful ethnic forces have ever proceeded. In viewing the situation, we may discover once more how the laws of physical environment coöperated with the laws of instinct in producing such marvelous results. There is little doubt, in the first place, that evenness of surface and approximation to sea level have a marked influence in preserving the aggregation or compact-

Region of the Lower Caspian the point of departure.

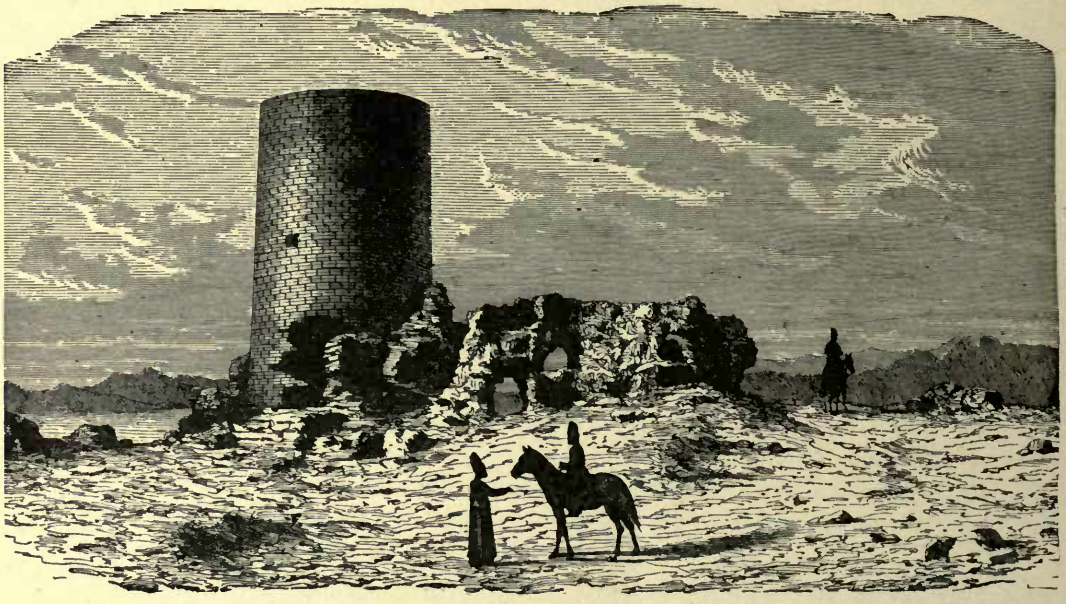
ness of tribes in the formative state, and in conducing to certain religious and political types of development.

In the next place latitude, with its invariable concomitant of temperature, contributes much to modify the peoples who are subject to given degrees of heat and cold. This is true in particular of tribes who are still in the plastic state. There can be no doubt that there is a childhood and a youth to mankind—an impressionable stage of evolution in which the influences of the external world are more potent in their reäction upon the mental and physical constitution than they are in later stages of development. In these early stages of society there are infantine susceptibilities and diseases from which the race recovers at a stage of fuller maturity. For this reason the early peoples in their migratory epochs have developed a constitution peculiarly significant of the climate and region of their tribal sojourn. The races of Ham became much darker in color than their Semitic kinsmen. They also grew sedate and austere, less disposed to highly developed forms of society, and, in brief, more like the desert and rainless countries into which they penetrated than were the races which distributed themselves further northward.

Hamites are ethnically modified by environment.

Among the oldest monuments of the Egyptians there are pictorial representations of the differences which had already been produced among the Noachite descendants by the influences of environment. The sculptors, in these representations, have unwittingly borne evidence of the tendency of races in the plastic stage of their evolution to conform to climatic conditions. The Egyptians defined themselves as *Roth*, meaning red, or ruddy, as to complexion. They pictured the cognate Semites as *Namahu*, meaning yellow; and the Japhethites, or North Mediterranean peoples, as *Tamahu*, or white. Yet it is now well known that these three types of color and the associated form, feature, and stature of the three peoples to

Egyptian sculptures evidence the early differentiation of races.



LANDSCAPE OF OLD ARYA.—RUINS OF TOUS.—Drawn by A. de Bar, from a photograph.

which they belong, were all of a common ethnic descent.

The race of Japheth on the north and east of Mesopotamia was, in its earliest stages of development, thrown into a region where nature *had greater variety* than in any of the countries where the Semitic and Hamitic families were dispersed. It was a region of uplands, rising easily into mountain ranges of considerable elevation. It was a country of snows, and particularly of storms in winter. There are few parts of the earth in which vicissitude in temperature and the whole external mood of nature are more pronounced than in the region south and east of the Caspian.

Primitive Japhethites affected by climate and surroundings.

The primitive Japhethites were exposed from the beginning to the full force of these climatic changes—to the flush of early spring, the heat of summer, the quick oncoming of the storm, the biting frost of a comparatively early autumn, the high winds, the blasts of snow and sleet peculiar to the winter months. It is in some sense a climatic maelstrom, and the Japhetic race was whirled and beaten in its childhood by the wild elements that dashed and turned from alternate calm to tempest, and from warm airs to biting blasts and freezing sleets. For these reasons the early Japhethites would, by the turbulence of nature, be impressed with greater restlessness, hardihood, and adventure than might be expected in the case of any other primitive people.

PASS OF THE ARAXES.

How great must have been the influence of such an environment upon sensitive peoples recently liberated from a parent stock in a more genial latitude! We have already seen that the Adamite seems to have come up from the low-

lying seashore, where the Ichthyophagi afterwards roamed, half-naked in the seashore sunshine, gathering shellfish from the brine. Many of these moderating influences had been carried by the Noachites into the Carmanian uplands; and it was from thence that the Japhethites were deflected to the northwest into the region of snow and mountains.

Indefiniteness of biblical references to the Japhetic dispersion.

Before beginning a review of the wider aspects of the Japhetic dispersion into remote continents, it can but prove of interest to note, as we have already done in the case of the Joktanian migrations, the narrower biblical plan of distribution presented in the tenth chapter of Genesis. Japheth signifies, etymologically, "widespreading," from which meaning of the word the inference is drawn that the name was applied to the Northern Aryans *after* they had shown the migratory disposition. Far back in the Noachitic era there was a prophecy that Japheth should be *enlarged*. Everything from the biblical point of view points to the expansion of this branch of the Noachite family. The close relation of the western division of the race with European tribes is shown in the fact that the Greeks had a myth of their own ancestor under the name of Iapetus, which is clearly the same as Japheth. In general terms, the countries assigned to the descendants of this branch of mankind are called the "isles of the gentiles." Doubtless the expression is poetical. The Oriental imagination substituted "isles" for countries in general, no doubt from the *remote* and seagirt meaning suggested by the word.

If we scrutinize carefully the Japhetic family as recorded in Genesis, we shall find seven sons, or founders of tribes, assigned to the head of the race. These are, first of all, Gomer. Among the descendants of this ancestor many names are found, even in Europe, which preserve the etymology of the ancestral title. Rawlinson has noted the presence of the Gimirians among the cuneiform inscriptions, belonging to the age of Darius Hystaspes. The Cimmerians, dwelling on the northern shores of the Black sea, are believed to have their name from Gomer. The word Cymri (Kymri), one of the Celtic names of Western Europe, is thought to have the same origin; and the words Cambria, in England, and Cambrai, in France, preserve, perhaps, an etymological tradition of the oldest branch of the Japhethites.

Seven tribes of the Japhethites; the race of Gomer.

The first son of Gomer was Ashkenez, from whom, no doubt, the ancient tribe of Ascanians, dwelling to the south of the Black sea, were descended. These are believed to have been the ancestors of the Phrygians, and were therefore closely related with the Hellenic emigrants who subsequently peopled Greece. The country of Ascania extended over the land of Troy, from which circumstance we may deduce something of the ethnic relations existing between the Trojans and the Hellenes. It is worthy of note that "the boy Ascanius," the son of Æneas, founder of mythical Rome, perpetuated the ancestral name of Ashkenez. It is not impossible that the classical name Euxine, formerly spelled Axenus, is also derived from the ethnic designation of the early race dwelling on the southern borders of this sea.

The second branch of the Gomerites was, according to Genesis, deduced from the tribal ancestor Riphath. From him are thought to have descended the ancient Paphlagonians, whom Josephus designates as Riphaces. This people,

Place of the Riphaces in the ethnic scheme.

like the Ashkenites, dwelt on the southern borders of the Black sea, though the location has not been so definitely determined as that of the first Gomeritic division. On the whole, it is likely that the Riphaces had their dwelling place somewhat toward the east, in a district which was properly included in Armenia. The third son of Gomer was Togarmah, who is believed to have founded an Armenian tribe which may be identified with the modern Thorgonites inhabiting the same region.

The next branch of the Japhethites was deduced from the second son, called Magog. But it is difficult to determine into which of the Black sea provinces this division was led and distributed. There is general consent that the famous savage race of Scythians were the offspring of Magog. Some ethnographers have referred the Turanians in general to this origin, and others have derived the Circassians, inhabiting the mountainous district between the Caspian and the Black sea, from the Magogian stock.

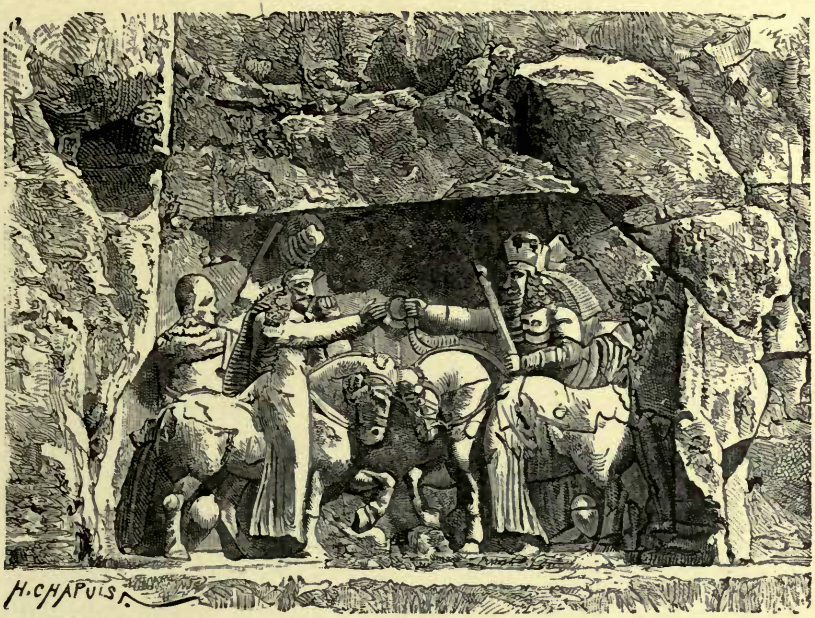
Distribution of the Magog and the Madai.

Concerning the Madai, who are recorded as the third tribe of Japheth, there can be little doubt that these were the ancestors of the great race of Medes, whose country spread from the Upper Zagros toward the east, as far as Hyrcania and the desert of Aria. Subsequently, in the development of the Median race, the nation spread southward over the Iranian plateau, and passed by conquest into Assyria, and even to Babylonia. But the prehistoric tribes descended from Madai were limited to the northern provinces east of the mountains.

The fourth son of Japheth was Javan, easily identified with the Greek ancestral name Iaones, from whom, according to the Hellenic tradition, the Ionians of Asia Minor and the Ægean islands were descended. Traces of the Javanites have been discovered among the inscriptions of Egypt; and the Greeks as a race were called Javanas among the ancient Hindus. The Arabic word for Greeks is Yunan, which is evidently of the same etymology with Javan. In later times the Hellenic ethnographers were disposed to accept Iaones as the ancestor of their whole race, and to make Ionian and Greek equivalent terms.

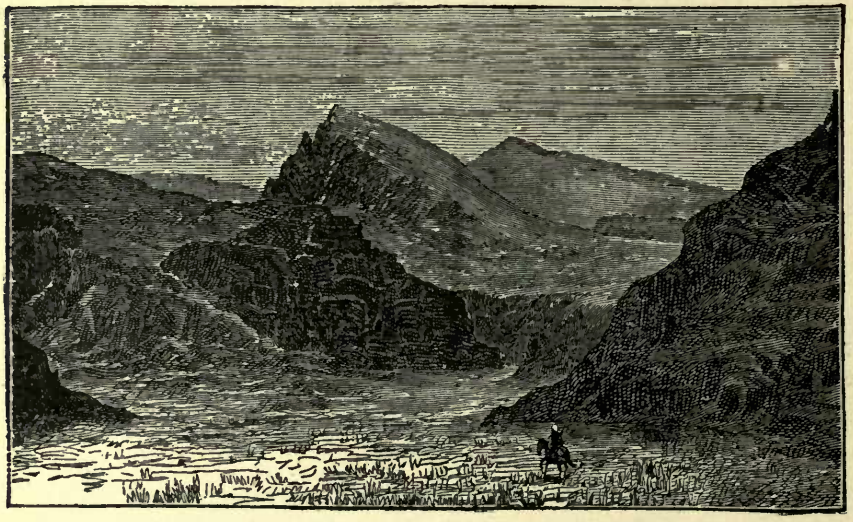
Traces of the dispersion of the Javanites.

From the Javan, several ancestral stocks are said to have been derived. The first son bore the name of Elishah, and it is



OLD MEDIAN TYPES—THE SASSANIAN PRINCES (OF THE SCULPTURES).
Drawn by H. Chapuis, from a photograph by Madame Dieulafoy.

possible that the Greek state of Elis, in the eastern part of Peloponnesus, perpetuated this name. Some have suggested that Hellas itself is a derivative from Elishah. Tarsus, on the Cilician coast, has been derived from the word *Tarshish*, assigned as the name of a second son of Javan. A third tribe was called Kittim, which is believed to have been distributed near Paphlygonia, or possibly into the island of Cyprus. A fourth division of Javanites were the Dodanim, which we may possibly identify with the Dodonians of Macedonia. The tribal name is sometimes spelled *Rodanim*, which would point to the island of Rhodes as the locality of this branch of Javan.



GATEWAY OF THE EAST ARYANS INTO INDIA—THE BOLAN PASS.

The race of Tibareni, mentioned by the Greek historians, have generally been referred to the Tubal, fifth tribe of Japheth. They have been identified with the original Georgians, but the name in itself does not indicate the descent. In the Iberians we may discover traces of the original name. The latter had their habitation bordering on the Black sea and reaching out on the southern slope of the Caucasus.

Probable identification of the Georgians with the Tubalites.

The sixth son of Japheth is called Meshech, whose descendants were doubtless the ancient Moschi. The territory of this tribe lay next to that of the Tibareni. The Moschian range of mountains preserves the word in the north of Armenia to the present time. According to a conjecture of Rawlinson, the modern national name of Muscovite is derived, through Moschi, from the Japhetic Meshech.

It is believed that the great Thracian stock of mankind may be traced up to Tiras, the seventh and last of the Japhetic progeny. It is thought that the country into which this branch of the race was distributed was on the north of the Black sea, on the banks of the Dniester, the name of which river is believed to preserve the etymology of Tiras. Afterwards the same geographical name was carried into Europe. The Thracians were originally distributed over a wide range of country, extending from the Black sea as far as the borders of the Cimmerians.

Possible derivation of the Thracians from Tiras.

It will be seen that according to this genealogical scheme, deduced from the Book of Genesis, the dispersion of the Japhethites was wholly to the *westward* from the point of departure. This indicates that the eastward migrations of the race, so important in the subsequent development of the Medo-Persian up-

Biblical scheme represents the Japhethites as developed westward.

lands and India, were unknown to the Hebrews, or at least omitted from the ethnic tables which they preserved. As a general fact, the Hebrew accounts of peoples other than themselves were limited to the necessity of the case, while the movements of the Abrahamites were expanded and developed in full proportions.

A second observation relative to the Japhetic dispersion is that according to this sevenfold tribal scheme all, or nearly all, the races of Indo-European origin are located in Armenia and around the shores of the Black sea. The territory contemplated by the Hebrew author extended westward into Phrygia and at least as far as the Ægean islands. It is safe to mark out the wilds of Thrace and the island of Rhodes as the westernmost boundaries of the Japhetic dispersion as deduced from the tribal references in Genesis. But if we examine the geographical knowledge which was possessed in the times of the composition of the earlier Hebrew books, and join to this the comparative indifference of the race to the movements and distribution of the Japhethites, we can discover sufficient reasons for the imperfection or inadequacy of the ethnic scheme. It now remains to look at the question in the broader light of historical and linguistic indications.

How far the Hebrew outline of Japheth extended.

It has already been indicated in the first chapter of the preceding book that the study of language has led to many rectifications in the general scheme of knowledge. In no other department of science has this correction and emendation of previous opinion been more manifest than in ethnography. One of the most striking examples of the improvement of the old scheme of learning by the new linguistic contribution is found in the discovery that the Indic peoples of Hindustan have certainly been derived from the same origin with the great nations of Europe and America. The bringing to light of the identity of Sanskrit in its elements as a language with the Greek and Latin opened up a totally different view of the movements and distribution of the Indo-European family of men. The slightly subsequent demonstration of the identity of the language in which are recorded the sacred writings of the Iranic or Persic race, added proof to proof of the great community of the six or seven branches which are now known to compose the Aryan family of nations.

Great contribution of linguistic science to ethnography.

Ethnographers were quick to seize upon these additions to their previous knowledge; and one of their first works was to trace backward the Indic streams of mankind through the passes of the Hindu-Kush to its confluence with the Iranic stream, and then to follow up the Old Indo-Persic family in its descent from an ancestral home common to themselves and the Græco-Italic stock in Europe. These ancient and shadowy movements, most important in the dissemination of the strongest peoples in the world, have now been sufficiently delineated, and the scholar of to-day may trace with comparative certainty the ethnic lines which mark the course of primitive peoples from the great center which they had in common, eastward of the Lower Caspian, to their several destinations in distant continents.

Discovery of Indo-Iranic affinities by means of Sanskrit.

The primary movement of the Old Aryans in the geographical vortex just referred to appears to have been a sort of spiral, throwing off streams east and west from its circumference. The oldest

First movements of races from the Aryan nidus.

of these departures was that toward the southeast. It contained the potency of two principal developments, an older and a younger; the former finding its geographical area of expansion on the table-lands of Iran, and the latter continuing in migratory movements to the east, until it descended from the mountain gaps into the Punjab, and thence down the Indian valleys to the sea.

The first peculiarity of this remarkable departure is the fact that it stands alone of all the Aryan migrations in having a general direction *toward the east*. All the other dispersive movements of this race were *to the west*, the tendency being in common with that of the Semitic and Hamitic families on the south. The Eastern Aryans, however, made their departure *against* the course of nature, and followed it persistently across nearly a third of Asia to their final lodgment and distribution in the East.

Hints of physical laws governing the movements of races.

The reason for this reversal of the general migratory movement to the West, and of the departure of the Eastern Aryans from what appears to be a common ethnic law, is difficult to determine. The earth is held in equipoise by the electric currents with which it is girdled and by which all its magnetic elements are polarized. These encircling influences, which are doubtless determined in their fundamental direction by the diurnal course of the sun, extend into and control all the vegetable and animal life on the surface of the planet. Every vine and tendril that springs from the earth and seeks a support twines around the object to which it fastens in obedience to a common law which determines the *method* and *direction* of the growth. No mechanical means or contrivance can prevail against this obvious and invincible tendency of a vine to turn in its own direction about the object on which it seizes. In general, the tendrils of the vegetable kingdom follow the course of the sun, from left to right in a circle. In the animal kingdom the same phenomena recur. Bees departing from the parent colony follow, in every country, a given line of migration. Birds and quadrupeds also obey these cosmic influences, but are somewhat more variable in the directions of their tribal movements. As we shall see further on, the Brown races of mankind have in general carried the lines of their migration to the *east* instead of the *west;* and the same is true of the Australian and Papuan streams of dispersion among the Blacks.

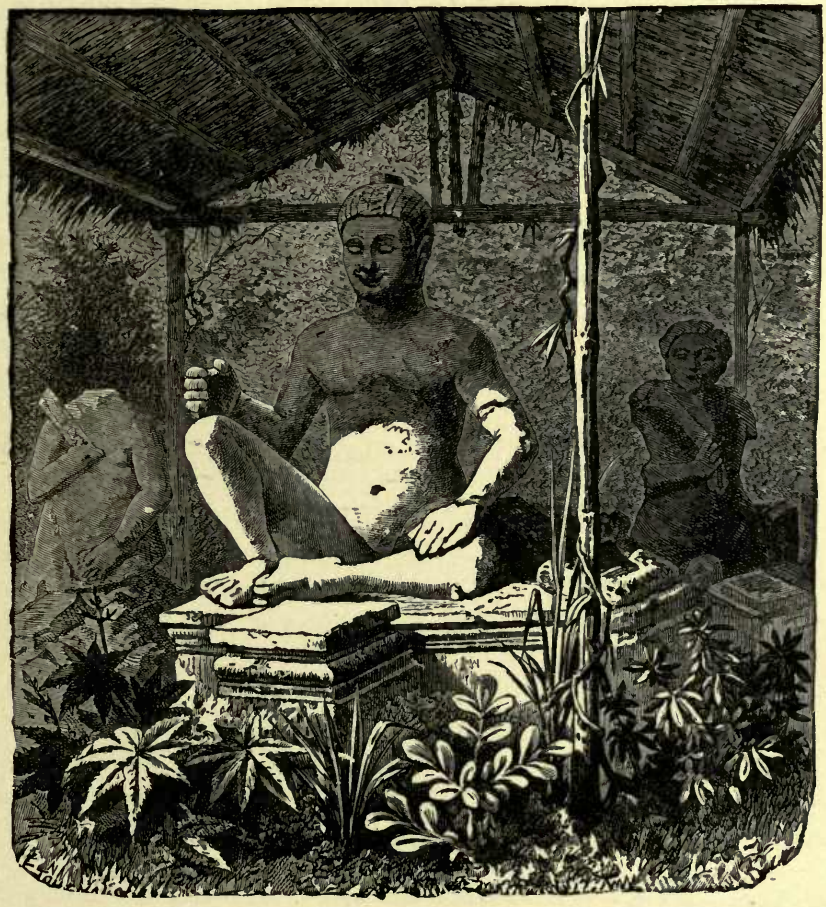
Possible reason for the direction of Indo-Persian migration.

But the Aryans have shown almost a passion for the westward course. All the original ethnic movements of this great division of mankind were toward the setting sun, with the single exception of that which we are now considering. Why should the Indo-Persian migration have disobeyed the general law? Why should the Ruddy race have contributed to populate the valleys of India at a distance so great from the original tribal departure? It may be said in answer, that the vegetable kingdom is not quite uniform in the directions of its growth. There are a few exceptional instances in which vines and tendrils are specifically opposed in their method of growth to the action of the common law, and when such reversal of the usual order is discovered in a given plant, it is found to be as obstinate in its manifestation as are those which conform to the usual methods of development. It is possible that something analogous to this may have prevailed among the Eastern Aryans to the extent of a prevalent instinct contrary

in its action to the usual desires and dispositions of the race.

At any rate, the first great migration of this family of mankind was toward the rising sun. The epoch in *time* in which the movement began can not be ascertained, but the *condition* of the migrating nation has fortunately been, to some extent, preserved in the language. The old books of the Iranic and Indic races have been to the ethnographer what the stone-leaves of the earth are to the geologist. There are even to be discovered in these works some hints of chronology. It is now conceded that the Rig-Veda is the oldest book in the possession of the human race. It may be that investigations hereafter among Orientals, particularly the Chinese, may substitute some other work for the Hindu Bible. It is now generally admitted that the earliest hymns of the Vedic collection go back to wellnigh three thousand years before our era. The sacred books of Zoroastrianism were compiled at a later date. The evidence of language is sufficient to show that the Iranic speech and religious institutions were developed at a period considerably subsequent to that from which the Rig-Veda proceeded. It is possible that the hymns and ceremonials composing this most ancient book were sung or chanted by the Aryan tribes long before they descended into the valleys of India. It is certain at least that the language was well forward in evolution of structure and determination of vocabulary while the Iranians and Indicans still drifted in a common migration toward the south and east.

Light derived from Iranic and Vedic literature.



TYPE OF THE ANCIENT BRAHM—LEPER KING OF ANGCOR WAT.
Drawn by E. Tournois, after a sketch of Delaporte.

The distribution of the Indic peoples, first into the Punjab and afterwards into the lower valleys, thence into the uplands, and finally eastward to the foothills of the Himalayas, has already

been described. It was here that the great race of Brahm expanded through centuries of progress into that fixed national form which we discover in the earlier epochs of authentic history. Here the Brahmanic form of worship prevailed. Here the Indian castes were established in society. Here those peculiar philosophical theories of life and duty and destiny were evolved which seemed to be an exact reversal of the beliefs and dogmas of the Western nations. It will be the work of a subsequent chapter to trace out this eastern-most development of the Aryan peoples, to note its peculiarities and tendencies, and to contrast the life of the Hindu peoples with the more aggressive and active social phenomena exhibited by the primitive races of Europe.

Expansion of the race of Brahm in India.

In the case of this migration we have another example of the disposition of primitive tribes to hang together and maintain their solidarity for a considerable distance toward their unknown destination, and then to depart into two or more courses of independent development. While the Indic branch of the eastward-bearing Aryans had been making its way farther and farther toward the Indian valleys, the Iranic division gradually spread from the common movement and turned into the half-desert plateaus on the south. The movement was first into Media Proper, and then into Persia. The course of this branch of the race, which may be defined as Indo-Iranian, appears to have been almost exactly the reverse of that of the original Ruddy stock making its way north and westward from the shores of the Indian ocean.

Primitive tribes hang together in the migratory movement.

It is not the purpose at the present time to note in extenso the establishment of the Median tribes and their organization first into a political community and then into a kingdom. It is well known that the Medes preceded the Persians in the formation of a body politic and in the development of the arts. We are here, however, on the borders of history, and pass, for the present, from the eastward dispersion of the Aryans, to note the still wider and more significant distribution of the race into the westernmost parts of Asia and thence into Europe.

The Medes precede the Persians in historical development.

CHAPTER XXVIII.—THE WEST ARYAN MIGRATIONS.

IT is clear from the evidence in possession of modern scholars that there was an attempt on the part of the original Aryans to make their way around the eastern shores of the Caspian and thence westward across the Ural river; and it is also clear that this movement did not succeed. The migrations in this direction reached no further to the north than the sea of Aral, where the course of the tribes was permanently checked. It is more than likely that the climate in this region was so severe as to prevent further progress in that direction. The country between the Lower Ural and the Aral sea is one of the bleakest and most forbidding in the world, and Aryan adventure was stayed in this direction.

In these facts we discover another example of the peculiarities of migratory tribal movements. Ethnic progress is by no means so rapid and exact as the word *migration* would imply. These north-bound Aryans, if they had been "emigrants" in the modern sense of that word, would have continued their course around the Caspian to the north, and would have found an ample vent for westward expansion afterwards. But the movement of primitive tribes is a *progress* rather than a *migration*. The removal from place to place is slow. It involves camping, temporary settlement, and a test of the locality as to its resources and suitableness for permanent abode. The ethnic movement is thus tentative in its whole course. It puts out in this direction and in that, testing the climate and the resources of the region, and spreading into different tracts adjacent until the course of further migration is determined by the inviting or uninviting character of the borders beyond. There is a sense in which the migrating tribe is always *tempted* to proceed on its way in a given direction. The imagination is allured to the extent of inciting a new departure. While the natural instinct of the race, in the form of cupidity or the spirit of adventure, furnishes the bottom impulse of the progress, the suggestions of the natural world determine its course and the rapidity and oscillations of the forward movement.

Sense in which "migration" is to be understood.

The north-bound migration which we have here described, and which ended with the Aral sea, contributed an aboriginal race between the Oxus and the Caspian. Here a single Indo-European family is represented which doubtless owes its origin to the very primitive movement just described. The Karakalpacks, whose territory lies immediately north of the Atrek river, which empties into the Lower Caspian from the east, are probably of Aryan descent.

KARAKALPACK TYPES—TWO USBEKS.
Drawn by A. Ferdinandus.

Northern limits of Aryan dispersion in Asia.

as are also a second tribe, called the Usbeks, who have their habitat further to the north; also the Tadshiks, holding the country immediately south of the sea of Aral, at the *débouchure* of the Oxus, are Indo-Europeans, and are the northernmost of the Aryan peoples of Asia eastward of the Caspian sea.

the Caucasus. Defined in terms of ancient geography, the course was across Media, through Atropatene and Armenia Major. In all this region—such was its geographical constitution—the migratory race appears to have held together. Indeed, it was not possible that there should be dispersion in a country

CAUCASIAN TYPES.—GEORGIAN WOMEN.—Drawn by Eugene Burnand, from a photograph.

In the meantime a still stronger migratory movement of the Aryans had taken place directly to the west. The stream of departure in this case carried in its current the potency of all the European nations. It extended primarily south of the Caspian along the upper parts of Mesopotamia, and was held from northern deflection by the spurs of

Sources of the race movement into Europe.

so confined. All of the ancient states which we have just mentioned were strongly Aryan in their original population, from which circumstance it is easy to discern how Aryan influences would press upon ancient Assyria from the east and modify that nationality by the infusion of many foreign elements. The modern countries of Mazanderan, Ardalan, and Adarbijan hold a similar rela-

tion to the Mesopotamian regions, and the pressure of the Kurds upon the peoples between the Tigris and the Euphrates has in progress of ages amounted to a conquest.

After reaching the more open region midway between the Caspian and the Black sea, the Aryans divided into two major streams, one continuing the westward course, and the other passing through the Caucasus mountains into Armenia. It is at this point that the line of departure to the right enters the Russian empire of modern times.

The first peoples of Aryan stock deposited in the region of this divergence were the Armenians and Georgians. Here is the seat of that great division of mankind to which the ethnographers of the last century gave the name of *Caucasian*. Until the more comprehensive scholarship of recent times had thrown a stronger light on the question, it was supposed that the White, or Ruddy, races had all issued from this source, the southern branch passing into Asia Minor, and the northern being carried around the Black sea into Europe. It is now seen, however, that the real origin of the Aryans lay further to the east, and that the starting point of dispersion in the Caucasian region was only secondary to an older departure beyond the Caspian.

First races planted on the lines of the outgoing.

It will be desirable in following out the great migrations which we are now to consider to take up first the western branch of departure and follow the same into Asia Minor, and thence into peninsular Europe. If from the eastern extremity of the Black sea to the northeastern limit of the Mediterranean a line be drawn, we shall find that all of the original peoples of peninsular Asia lying west of the line and east of the Black sea were contributed by the principal stream of Aryan migration to the west. This movement entered the peninsula centrally from the east and was distributed into all parts, especially around the southern shores of the Black sea. The only exception to the ethnic distribution here stated is the possible Pelasgic line of the Hamites, carried around from Syria into the archipelago. Otherwise, all of the prominent nations who, out of prehistoric shadows, came into view with the beginning of authentic history in Asia Minor were of a common Aryan descent, and this descent was immediately from the point in the Caucasus where the primitive races of Northern Europe took their departure into Great Russia and the West.

Origin of the Minor Asians; Hamitic influences.

The Aryans, once in Asia Minor, found themselves in a region inviting to development. The result was that in the earliest ages of history many states were created within a comparatively limited territory. Kingdoms and empires that even contended with the great powers of Mesopotamia arose in several parts of this Lesser Asia; and if the country had been as fortunate in the preservation, by literature and monuments, of the story of its past as were the states of Assyria, Egypt, and Greece, we might expect some of the most striking contributions to the ethnography and annals of primitive times. It will be fitting in this connection to notice a few of the leading peoples who were developed from the Aryan stem in the country between the Black sea and the Mediterranean.

Multiplicity of ethnic plantings in the Lesser Asia.

If any of the nations within the limits here defined belonged, in whole or in part, to other than an Aryan stock, it was the Cilicians, lying at the extreme

east of the peninsula and along the Mediterranean border. The physical features of this country are the Taurus mountains and the river Cydnus, both famous from the remotest ages for their historical associations. The belief is prevalent that the Phœnicians were first to colonize these regions, and it is quite likely that their adventurers and seamen passed around the coast and established settlements as far west as Lycia. To the extent that the Phœnicians had as the basal element in their race character an element of Hamitic descent, it will be proper to regard the Cilician race, especially of the seacoast provinces, as descended from the southern branch of the Noachites. But subsequently the incoming Aryans gave another complexion to the people. Cilicia was Aryanized, and remained ever afterwards virtually an Indo-European state. In the times of Hellenic colonization the Greeks sent around maritime bands, who settled along the Cilician coasts, and thus completed the race revolution which their ancestors had begun in prehistoric ages.

Place and race composition of the Cilicians.

North of Cilicia lay the still greater country of Cappadocia. The primitive race inhabiting this region was contributed directly from the Aryan migration westward. Indeed, the region lay immediately in the path of the great movement, and the people sprang up from the elements which were dropped by the race on its progress toward the Black sea. The same may be said of Paphlagonia, lying in the inner curve of that sea on the south. We have already seen that these countries were assigned by the Hebrew account to the sons of Japheth. Paphlagonia is believed to have belonged to the Kittim of the Japhetic dispersion, while the same country is by other writers assigned to the Riphaces, descendants of Riphath, the second tribal head of the Gomerites.

Beginnings of Cappadocian and Paphlagonian races.

Immediately west of Cappadocia lay the still more important country of Phrygia, with its northern peninsula next to the Propontis. This region also lay immediately under the center of the migratory line, and the primitive population was distributed in the manner already described for Cappadocia. The political power subsequently developed in this part of Asia Minor was of great importance in the earlier historical times. The state was touched on its various borders by Bithynia, Paphlagonia, Cappadocia, Lyconia, Pisidia, Lycia, Caria, Lydia, and Mysia. It was the center of the Lesser Asia. The country of which we here speak was called Greater Phrygia, to distinguish it from the extension of the same region along the Propontis, which was known as Lesser Phrygia.

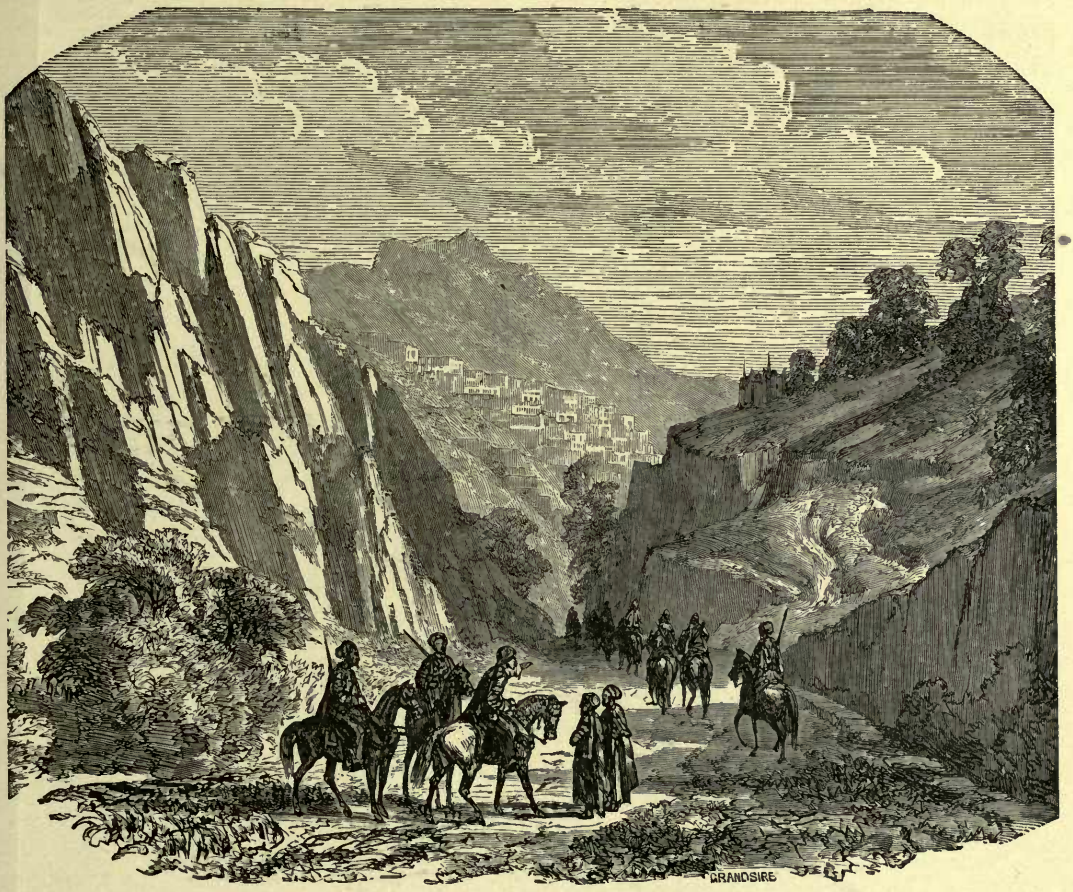
Rise of the Phrygians; their kinship with the Armenians.

According to the traditions of the various races of the peninsula, the Phrygians were the most ancient nation of Asia Minor. They were thought by the Greeks to be in close race affinity with the Thracians. There are also hints of their relationship with the Armenians on the east. Both of these conjectures of the ancients were correct. The Phrygians were the result of a migratory movement out of Armenia into the countries of the West, and the people were accordingly allied, by race descent, on the east with the Armenians, and on the west with the Thracians. It is not the place to review the important historical bearings of Phrygia in the earlier ages of Grecian history, or to repeat the traditions and legends which have been preserved of the nation.

South of Phrygia lay the smaller states of Caria, Lycia, and Pisidia; and to the

north, on the shores of the Black sea and reaching to the Bosphorus, was the country of Bithynia. All of these districts were peopled by tribes who were dispersed right and left from the original Aryan migration which brought the ancestors of the Europeans to the eastern borders of the Ægean sea. Immediately west of Phrygia, next the archipelago, was the important state of Lydia. The history of the people who were here developed is better known than those who grew into importance further east. The Lydians were nearly allied to the Greeks. The Ionian cities were on the Lydian coast, and the commercial relations between the peoples on the two sides of the Ægean were from the earliest ages intimate. The Lydians were to the Ægean sea what the Phœnicians were to the Eastern Mediterranean. In the arts and sciences they antedated the Greeks, and their history is only second in importance to that of the Hellenic states.

Other Minor Asians; Lydians in particular.



ROUTE OF WEST ARYANS THROUGH ASIA MINOR.—Pass of Hadjin, in Cappadocia.
Drawn by Grandsire, after Langlois.

We have thus noted the westward progress of the Aryans through the whole country from Upper Mesopotamia to the Ægean sea. This region of Lesser Asia presented one of the earliest fields of Aryan development. While the Medes and Persians on the east of the Zagros, and the Indic Aryans in the Punjab, were laying the foundations of their respective nationalities, the

Minor Asians contemporary with the Iranians and Indicans.

various peoples of Asia Minor, all closely allied by race descent and common institutions, were settling from the nomadic state into permanent residence, discovering the native resources which were richly distributed in their country, and creating those institutional forms out of which great monarchies, rivaling those of the valley of the Euphrates and the Nile, were to spring and flourish.

Reasons for the different streams of Hellenic migration.

It is probable that the westward progress of the Aryan race was considerably delayed by its course through Asia Minor. The richness of the country in resources, the fertility of the soil, the abundance of the forests which prevailed in prehistoric times, the acceptability of the climate, and the general beauty of the landscape invited to residence; and here the migratory and adventurous spirit would be checked. It was only after the peninsula began to be well filled with the immigrant race, when the nations began to contend and displace each other by conquest, that the old migratory impulse revived and progress toward the west was continued. These circumstances may account for the fact of *the different streams of migration* which appear to have discharged their volume into the Hellenic peninsula.

Race progress through the Cyclades into Hellas.

With the resumption of the movement to the west from the shores of Lydia we have the picturesque episode of a race crossing the Ægean by means of the archipelago. The Cyclades are generally within easy sail the one of the other, and the passage of a primitive people would be easy. The gradual spread of Phrygian and Lydian adventurers into these waters presents an aspect of dispersion quite as unique as it is poetical. Some ethnographers maintain that the incoming of the Hellenic race into Hellas Proper was by means of this island progress across the Ægean, while others hold that the true Hellenes dropped into Greece from the north, out of Thrace, whither they had drifted out of Lesser Phrygia, across the Hellespont.

Principal migratory route by way of Thrace and Thessaly.

Perhaps the truer view would be to ascribe the Hellenic peoples to both of these origins. Several kinds of evidence point unmistakably to the conclusion that the Hellenes were out of Phrygia. The Greeks themselves, though many of them held to the mythological opinion of an earth-born, or autochthonic, origin, recited the legend of a northern descent, and it is almost certain that a majority of the incoming tribes descended out of Thrace through Thessaly, where they had found a footing and partial development, after their migration from Asia. But that the general progress of the Aryan peoples was continued out of Asia Minor across the Ægean archipelago into the mainland, thus making the two streams confluent in the Hellenic peninsula, can hardly be doubted.

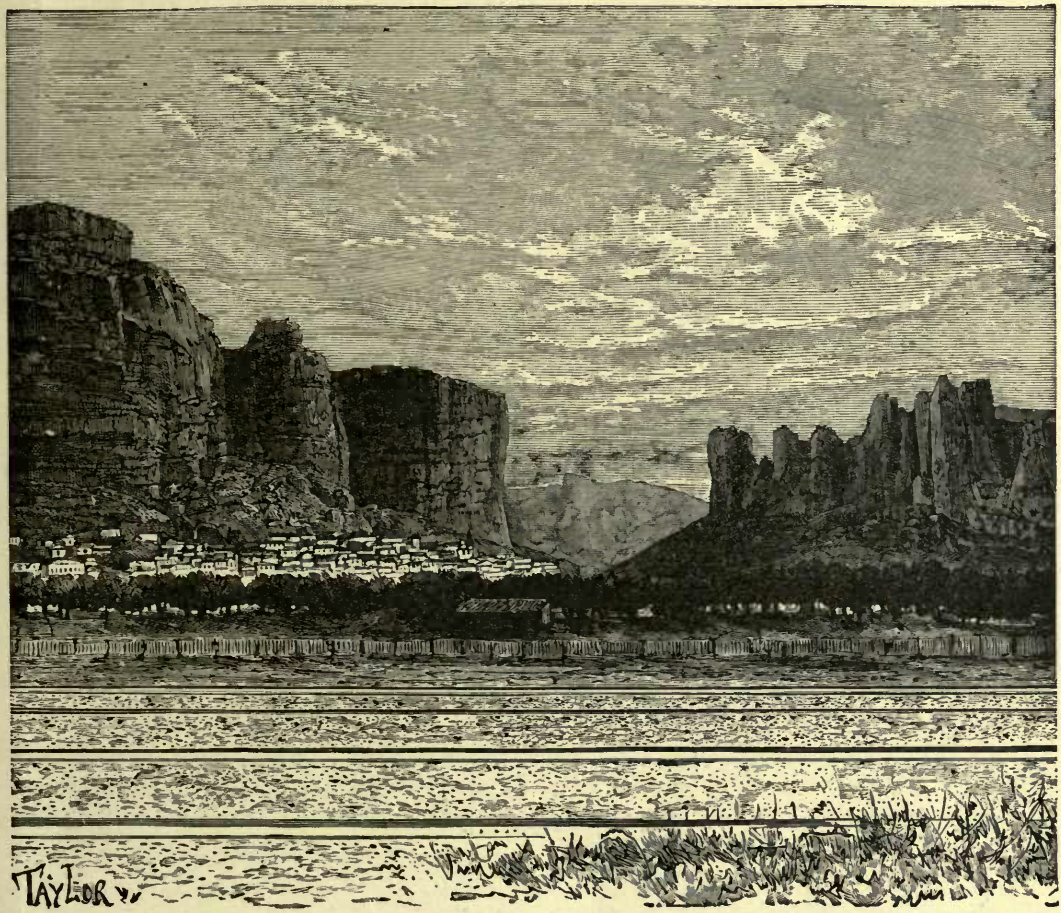
Ethnic restlessness of the Graikoi; meaning of the name.

Great was the restlessness of the early races in Greece. They were, perhaps, the most turbulent tribes of whom history has made a record. Ages elapsed before permanence of settlement was attained. They were ages of myth and adventure. The gods were mixed with the men, and the Titans stood between. It now appears that the older name of the people was in their own language *Graikoi*, a term which the immigrants had evidently applied to themselves with a view to distinction from more barbarous peoples. The word Graikoi, which subsequently, in the Latin form of *Graeci*, became the designative of the

Hellenic race among all peoples, signified old, or honorable. It was thus very nearly equivalent to the Latin *senator*. Aristotle declares that ancient Hellas was the country about Dodona and Achelous. "Here," he adds, "lived the *Selloi* and the people then called the Graikoi, afterwards the Hellenes." Thus it appears that the Greeks, in course of time, rejected the older national name and substituted Hellenes as the title by which they would be known among the nations.

We may here pause to anticipate what will appear in a subsequent part of the present chapter; that is, that this Greek, or Hellenic, volume of tribal life flowing into Hellas contained along with itself the elements which were afterwards to be distributed in Italy and to become the germs of the Italic, or Latin, race. The exact shape of the migration in this respect is, of course, unknown. It is sufficient to allege that the migratory wave out of Asia carried the potency of both the Greek and Latin peoples. The uncertainty is as to which foreran the other. It is possible that those tribes which were destined to plant themselves in Italy were the vanguard of the whole movement. Again, it is possible that the Celts of the extreme west went before the Latins, but the likelihood is that the Celtic stem was bent around from the north of Eu-

The Greek migration contained the potency of the Italican.



ROUTE OF THE GREEK ARYANS INTO HELLAS.—Pass of Kalabaka, Thessaly.—Drawn by Taylor, from a photograph.

rope and did not cross by way of the peninsulas. It is possible also that the prehistoric Greek and Latin stocks held together as far west as the Hellenic peninsula, from which point the Latin branch continued its course to the west. It is sufficient to know that the name Græco-Italic, designating the whole stock, is appropriate as descriptive of its ethnic character, until the two peoples were differentiated and distributed into their respective countries.

Linguistic hints as to priority of Greeks or Romans.

Students of language have been curious to inquire into the relative antiquity of the two races as determined by their respective dialects. It is a remarkable fact that the evidence points *both ways*. There are parts of the Greek grammar and vocabulary which are manifestly older than the corresponding parts in Latin, and, on the other hand, there are Latin constructions and words which are just as clearly of a higher antiquity than those of Greek. Thus the preservation of the ablative case in Latin points to the retention of a form of grammar which had died out of the more recent grammar of the Greeks. *Sumus*, the first person, plural, of the verb *to be*, is much more nearly identical with the Sanskrit *asamas* than is the corresponding *esmòn* of Greek; that is, *esmòn* is the more recent grammatical inflection. On the other hand, the retention in Greek of the dual number in nouns and of the middle voice in verbs indicates an older grammatical structure than that exhibited in Latin grammar, where no such nominal and verbal inflections exist. Likewise, the much more complete evolution of the Greek verb, considered in its entirety, and of the adjective, with its one hundred and thirty-five inflectional blossoms, shows a closer alliance with the full tables of the older Sanskrit than the narrower and later forms of Latin. There is, however, nothing really paradoxical in this seemingly contradictory testimony of language as to the relative age of the two races; for it is easy to perceive that *in some respects* the Greek tongue might preserve the older forms, while in other peculiarities Latin would retain the ancient structure and vocabulary less impaired by time and migration than in the corresponding linguistic development of the Hellenes.

Rise of the system of ancestral mythology.

Early in the mythical age, the incoming tribes superimposing themselves upon the Pelasgian peoples already in the peninsula, ceased to designate their race as Graik, and took up a sort of ancestral mythology, which they ever afterwards zealously disseminated. The story ran thus: The ancestor of their race was the immigrant hero Hellen. He was the son of Deucalion and Pyrrha. He led his tribe into Hellas after the Deluge. Hellen had three sons, Dorus, Æolus, and Xuthus. Dorus became the founder of one race and Æolus of another, while the two sons of Xuthus, Ion and Achæus—like Ephraim and Manassah, sons of Joseph, in the Hebrew scheme—rose to equal rank with their uncles, Dorus and Æolus, and became the heads of the Ionians and Achæans. It will be noticed in this table of family dispersion that the name Ion reäppears, recalling the Hebrew Javan and also the Hindu name Javanas, which occurs in the *Laws of Menu*, and is thought to designate the Ionians. This legendary account of the origin of the principal Greek races was accepted by the credulous Hellenes as an ample and final explanation of their origin and diversities of national development.

Historically considered, the Hellenes present two great branches of race

evolution: the one Dorian, and the other Ionian. These two are separated from each other by such marked characteristics as to distinguish them in all epochs of Greek history. The Æolian tribes do not appear to have diverged greatly from the common ancestral type. The term Æolian may well be regarded as discriminative of a number of partly developed Greek peoples dwelling in the northern part of Hellas, particularly in the plains of Thessaly. With the jostling of the other races from their original seats, however, the Æolians became more distinct as a people. When the Dorians possessed themselves of the Peloponnesus, the Æolians passed over to the northwest coast of Asia Minor and established there a confederation of cities under the name of Æolis. They also populated the islands of Lesbos and Tenedos, from which insular seats the Æolic dialect of Greek spread into other regions, and left behind some scanty specimens in Hellenic literature.

Place and characteristics of the Æolians.

The Æolian was the least important development of the Hellenic race. The Dorians were far more powerful and famous. Their native seats in the peninsula appear to have been between the ranges of Olympus and Ossa. At one period they invaded Macedonia and took possession of a part of the country, but were afterwards expelled. They established themselves in the island of Crete, and made the little state of Doris the seat of their power until the so-called "return of the Heraclidæ" carried them into Peloponnesus. Here they became predominant, and were the virtual founders of the powerful states of Sparta, Argos, and Messenia.

Evolution and race character of the Dorians.

It was from this epoch in their development that the Dorians became so strongly discriminated in their character from the other Hellenes. They became austere, rough in manners, and laconic in speech, to the extent of transmitting their name to all after times as a synonym for the peculiarly selfish, stoical, and indifferent character which they presented in their own age. Even the architecture which they cultivated retained unmistakable traces of the simplicity and severity of the Doric race, and the same may be said of that variety of Greek which they spoke, and out of which the dramatists, especially the tragedians, of the literary age were prone to draw those archaïc and rude forms of versification peculiar to the Greek tragical chorus.

MODERN ACHÆAN TYPE—ODYSSE.
Drawn by E. Ronjat, from a photograph.

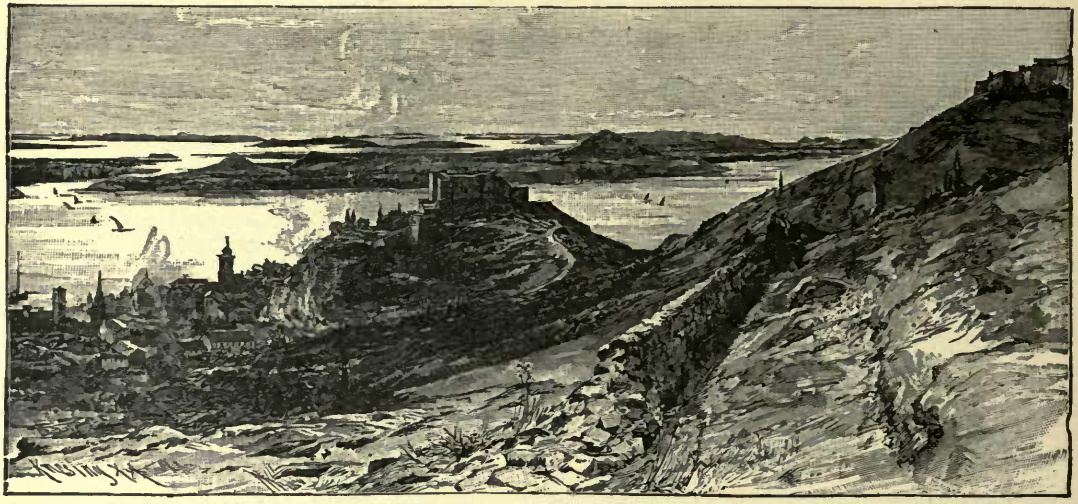
Ancient Ionia was on the coast of Asia Minor, between the rivers Hermus and

Mæander. The adjacent islands of Chios and Samos were included with this dependency. How far the Ionians, or Javanites, had been distributed along this shore before their migration into European Greece can not be stated with certainty. The country above defined was determined in its limit after the return of the Ionians, in later times, and their resettlement in the region of their ancient home. Here it was that they founded the Ionian confederacy of twelve states or cities called the Dodecapolis.

Situation of Ionia; the Dodecapolis.

It remains to note the geographical situation of the Achæans. It is believed that in the heroic age Mycenæ, Argos, and Sparta were peopled by tribes of Achæan descent. This race also extended into Thessaly. Indeed, the latter country is thought by ethnographers to have been their original seat, whence they migrated into Peloponnesus. The importance of this branch of the Greek race was greatly lessened in the time of the Hellenic ascendency. In the Homeric age the leadership of the Achæans was constantly recognized, and in the *Iliad* their name is many times employed as a synonym for the whole Greek host engaged in the Trojan War. They appear, however, to have been lacking in the elements of intellectual greatness. In the later epochs of Greek history the term Achæan sank from its old heroic sense into a name of contempt. But it is of interest to note that, geographically at least, the relative importance of the race was acknowledged by the Romans, who, on their conquest of Greece, gave the name of *Achaia* to the whole province.

Rank and relations of the Achæans among the Greeks.



ROUTE OF THE GRÆCO-ITALICANS.—SEBENICO, ON THE DALMATIAN COAST.—Drawn by Charles W. Wyllie.

Many of the most important maritime towns of the fifth, fourth, and third centuries B. C. were included in the list. Here were Miletus and Ephesus, Clazomenæ and Phocæa. The city of Smyrna was transplanted, about 700 B. C., from the Æolic to the Ionian confederation. In course of time this assemblage of important communities became subject to Lydia, and after the overthrow of Crœsus they were annexed to the Persian empire by Cyrus. Ionia furnished the field of broken faith and conflicting interests from which began the great struggle for the subjugation of Greece by the Persian kings.

Such is the outline of the distribution of the early Aryan tribes in Hellas. The geographical relations between that peninsula and Italy were always easy. The Adriatic is, even in its widest part, a narrow body, easily crossed from shore to shore. The course out of Epirus around the coast into Upper Italy is crossed with no barriers and attended with no difficulty. It can not be known by which of these routes the primitive peoples of Italy were distributed to their several tribal localities in the West, probably by both. It is safe to assume that a race which had made its way from beyond the Caspian, passing centuries en route in a contest with the forces of nature and crossing from island to island in more remote ages, would easily navigate the Adriatic. And this is the more likely highway of the prehistoric Italicans.

Easy ethnic relations of Greece and Italy.

According to our best information there were four principal groups of peoples in primitive Italy. On the south we find the Iapygians, or Œnotrians, with their several branching tribes, occupying first the peninsular projection next to Greece, and afterwards the whole country across to the Tyrrhenian sea. Some ethnographers have concluded that these southern peoples were not of Aryan descent, and it is possible that the Hamitic lines which we have agreed to carry into Italy distributed some branches in the southern parts as well as in Etruria. Upper Italy was occupied on the east by Gaulish, that is, Celtic, tribes, of which the Lingones and Insubres constituted the chief. On the west, as we have already seen, were the Etruscans, who were clearly a foreign race, differing radically in language and development from the other Italic peoples.

Place of the Iapygians; races of the north.

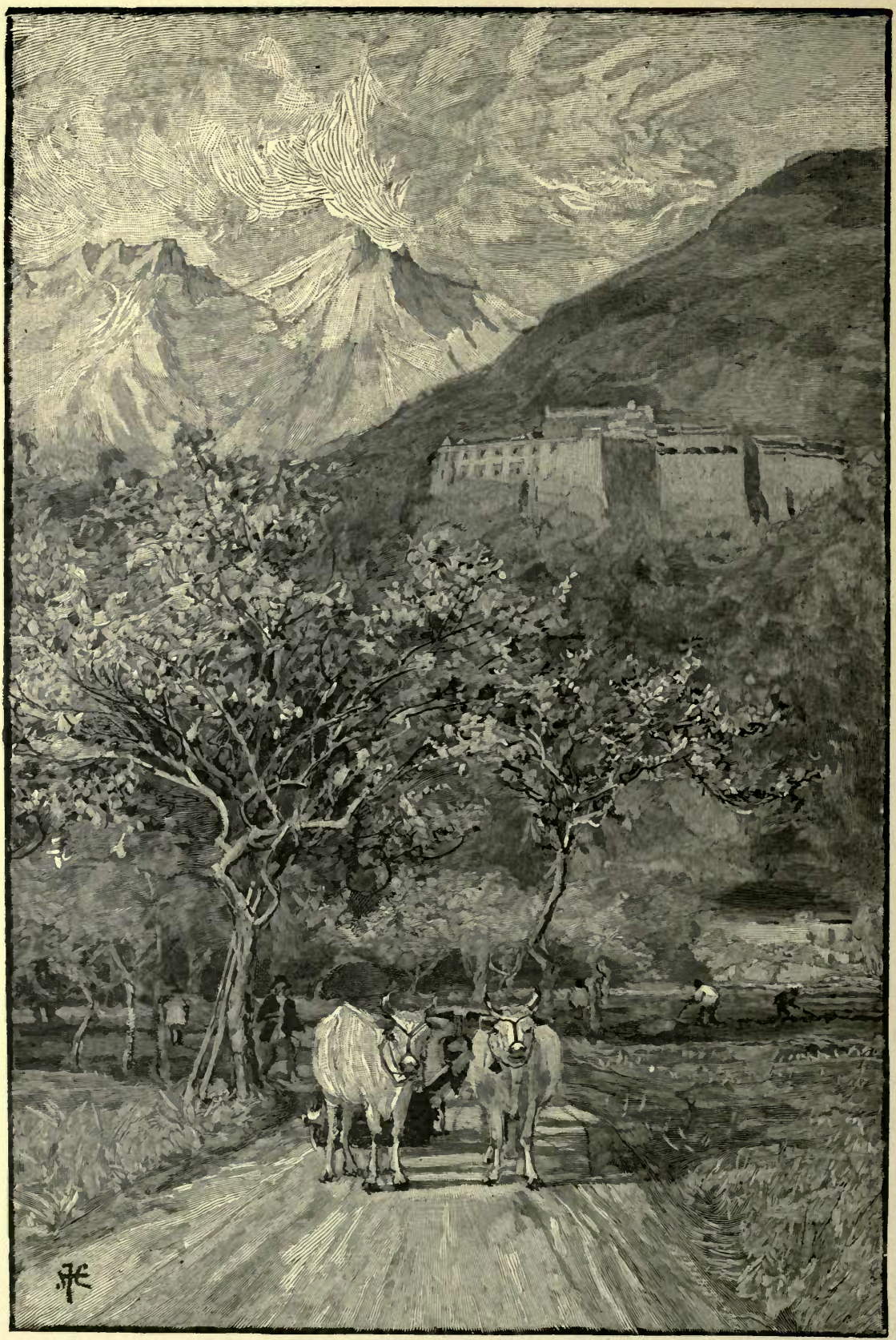
The greatest group of primitive tribes belonged to Central Italy and were nearly allied in ethnic descent. Of these peoples there were five distinct stocks, namely, the Umbrians, the Sabines, the Latins, the Volscians, and the Sabellians, commonly called Oscans, with their two branches of Samnites and Campanians. This scheme covers in general the populations which were distributed in the country stretching across from the Central Adriatic to the western shores of Italy.

Distribution of the Umbro-Sabellian tribes.

The first of these nations, called Umbrians, had their original seats on the Adriatic, between the Rubicon and the Æsis. The western boundary was the Apennine range and the Tiber. It is likely that in early times their territories were still more extensive. But before the rise of the Roman gens the Umbrians had already declined, and were easily subordinated by the dominant people. The territory of the Sabines lay close to Latium, and they and the Latins had intimate relations from the earliest times. The Sabine district was rugged in physical features and inclement in climate, and the opportunities of development were much less favorable than those of the people on the west.

The origin of the *Latins* is involved in inextricable myths. Poets and fable-makers of republican and imperial Rome elaborated and inflected the legendary lore which they had received from antiquity until it resembled the Greek fables in complexity and contradiction. One myth assigned to the Latins a Pelasgic origin, in common with the Peloponnesian Greeks and the Etruscans. More famous was the tradition of a descent from the heroic families of Troy. A more obscure legend assigned the moun-

Myth and tradition of the primitive Latini.



LAND OF THE ANCIENT LIGURIANS.—Massa, near Carrara.—Drawn by J. Fulleylove.

tainous parts of Central Italy as the native seat from which the founders of Latium had descended into the low countries of the west. There was an attempt in all this to bring in, after the Greek fashion, the agency of the gods, and to make it appear that the Latins were of divine origin and fatherhood. It is sufficient to recognize the kinship of these peoples with the other races associated with them in historical development in Central Italy.

Scanty knowledge of the Volscians; their situation.

The Volscians were prominent among the prehistoric peoples of the peninsula. They had for their neighbors the Sabellians, or Oscans. Their home was in the forbidding mountain district with which their name is geographically associated. At the beginning of authentic history they had ceased to be a separate people, and the remains of the race are scanty and imperfect. It may be said, however, that their isolated situation in the mountains tended to preserve their dialect from the mutations to which the languages of the neighboring tribes were subjected.

Predominance of the Oscans; the Italian Gauls.

In the earliest times the Oscans possessed the largest territory in Central Italy. Their country extended well to the south, and this wide region they continued to dominate until Rome began by conquest to become mistress of Italy. Of the various Oscan peoples, the Samnites were the most powerful tribe, though the Campanians, Lucanians, and Bruttians were all important peoples before the ascendency of Rome.

If we glance to Northern Italy, we find three peoples of different ethnic descent in that region. The Gauls proper occupied the great plains in the valley of the Po and its tributaries. Their country extended from the Alps to the Apennines and the Adriatic. It was commonly conceded that their immigration into Italy had been of a later date than that which must be assigned for the coming of the central nations. The principal divisions of the Gaulish race were the Insubres and the Senomani on the north of the Po, and the Boii and the Lingones on the south of that river.

The second general division of the peoples of Upper Italy were the Veneti, whose country covered the whole head of the Adriatic from Istria on the east to the valley of the Po in the west. Corresponding with what is now the southern part of Piedmont lay the territory of the Ligurians, of whose origin not much is known. They came into the country, however, before the Gauls, and were doubtless allied in their race descent with the peoples of Central Italy. Such in general was the tribal distribution of those primitive races which in process of time were consolidated under the leadership of the Latins, and ultimately forged into the most powerful nationality of the ancient world.

Place and derivation of the Veneti.

It appears tolerably conclusive that the Græco-Italic migration reached its limit with the Alps on the north and Liguria on the west. Other Aryan tribes in course of time found their way through the Alpine passes, and penetrated the civilizations established by their kinsmen in the south of Europe. But the Italic race proper was stayed with Italy. We therefore return to the East and again take our stand in the region of the transcaucasus. Here, on the northern slopes of the Armenian mountains, we find the Aryan dispersion pressing boldly to the north.

Limits of the Græco-Italic migrations.

In the country between the Caspian

and the eastern shore of the Black sea at least two ethnic departures were made from the main branch of migration. The first of these was to the right of the line of progress, and contributed the Ossetes and perhaps one or two other stocks of Indo-Europeans on the western borders of the Caspian. The other division seems to have been maritime in its plan, to have entered the Black sea, and to have carried itself in the direction of the Bosphorus. It is not unlikely that the ancient Phrygians, especially that part of the race inhabiting the Black sea coast, were contributed by this deflected movement out of Upper Armenia.

Origin and course of the North Aryan distribution.

By the course of the line we are now pursuing we are unexpectedly brought into proximity with that country in Asia Minor which received the final migratory impulse of the Celtic race. Though we have not yet reached the point in ethnic dispersion from which that race took its departure from the main northwestern stem of Aryan progression, we may well anticipate sufficiently to account for the presence in Asia Minor, on the southern borders of Bithynia and Paphlygonia, of a country peopled by Celts. This is the province of Galatia. The population of this country was contributed by the bending back of the Celtic race from its western limits of migration in the remote parts of Europe. The movement in question presents one of the strangest aspects of race progress. It is that of an ethnic line carried backward from the lower parts of Spain, in the old country of the Iberians, around the northern coasts of the Mediterranean, across Upper Italy, and down through the valley of the Danube to the Bosphorus. The latter part of this movement took place in the historical era. In the third century B. C. the Gallic people crossed over into Asia Minor and conquered the province to which they gave their own name. This invading migration was carried forward by three principal tribes and twelve tetrarchies, each directed by a chief, after the Celtic manner of warfare. It is instructive to reflect, while we here have our stand on the highlands of Phrygia or Pontus, that we are able to observe, as with a field glass, the northward movement of the old Aryan stock on the eastern borders of the Black sea, while, on the other hand, we can look down into Galatia, which was the terminus, after perhaps two thousand years, of one branch of the great migration.

Ethnic movements by which the Celts reached Galatia.

If then, for a moment, we anticipate the departure of the Celts from the main Aryan stem, which we are now tracing, to the north, we shall find the same to have occurred about the valley of the Upper Dnieper. From this point the migratory impulse bore off almost due west, across the larger part of Europe. It traversed Germany, and crossed the Rhine in general conformity with the coast line of the Baltic. It is probable that by this first movement to the west no races were deposited in anything like permanence until the stream was dispersed in Gaul. If we seek for time relations in this great movement we are at fault, but the period of the Celtic migration could hardly have been less than two thousand years B. C.

Point of departure for the Celtic dispersion in Europe.

It would appear from the invasion of Gaul and Britain by the Romans, in the first century B. C., that the Celtic race had already been long established in those regions, and that it had matured its institutional forms without disturbance. This is especially true of the

Complete development of the race in Gaul and Britain.

western parts of Gaul and of Britain, where the completeness of the druidical ceremonial and perfect condition of tribal government indicated a long occupation of the country. Ethnographers have not attempted to decide with certainty the priority of the respective movements by which the British Isles received their primitive Celtic population and Central Italy passed under the dominion of Græco-Italic immigrants.

In the beginnings of authentic history the Celts had already traversed Northern Europe, and had left traces of their progress in the east and actual tribes in the west. It was from this source that the Gauls (Celtæ), whom Cæsar declares to have been divided into three races of Galli, Aquitani, and Belgæ, were distributed. In all of Europe west of the Rhine the Celtic race became predominant, almost to the exclusion of other people. If we except the Basques and Iberians, it may be said that the whole country between the Rhine and the Atlantic was Celtic as to its primitive population.

Wide distribution of the Celts throughout the West.

In the preceding book we have already pointed out the fact that prehistoric races occupied this part of Europe before the Aryan migration. What the condition of the aborigines was at the time of the incoming of the Celts we are left to determine by conjecture. We have seen the extreme barbarity which characterized the aboriginal life of the cave dwellers and other savages to whom primeval Europe seems to have belonged. Upon these rude races the Celtic tribes were superimposed, and the foundations

The Celtic races superimposed on aboriginal barbarians.

THE CELTIC VANGUARD, OF THE AGE OF BRONZE.
Drawn by Emile Bayard.

were laid of that condition which we perceive when the expanding power of Rome brought her legions into Gaulish territory.

As the Celtic race continued its way to the south, several streams of migration put off laterally to the coast. The most important of these crossed the channel into Britain, where it again divided, one branch being carried over into Ireland, and the other penetrating the Highlands of Scotland. An examination of the Celtic languages has enabled the modern ethnographer to determine with toler-

Ramifications of the Celtic stock in the British Isles.

OLDEST CELTIC TYPES.
From the Gaulish bas-reliefs found at Entremont, near Aix.

able certainty the original distribution of the race in the British islands. There were two general Celtic stocks. The first of these was the Gadhelic, or Gaelic, branch, which was divided into three departures: the Irish stem proper, called the Erse, the Scottish Gael, and the Manx. These linguistic divisions point unmistakably to the tribal separation of the Gael of the Highlands, the Irish folk, and the inhabitants of the Isle of Man. The second stem presents the British division proper of Celtic. This also parted into three: the first of which was the Kymræg, softened into Cymric, meaning the original speech of the Welsh; the second was the Cornish; and the third the Armorican, being the language of Bretagne.

We thus note the dispersion of the Celts in our ancestral islands, and discover the parts of the country appropriated by the several tribes. Meanwhile, far down in Spain the main continental stream of Celtic migration was bent backwards, as we have seen above, through the greater part of Southern Europe, making its way finally to the valley of the Danube and thence to the Bosphorus. From this point migration and warfare carried the race, as has been said, into Galatia, thus bringing it in its final distribution to a point so near to the original Aryan movement east of the Black sea that the old departure of the race to the northwest and its last distribution in Galatia after thousands of years of wandering might almost be seen with a field glass in the hands of the observer from the highlands of Eastern Pontus!

Bending back of Celtic migration to the place of beginning.

In resuming the consideration of the movement of the great northwestern branch of the Aryan race, making its way between the Black sea and the Caspian, from the transcaucasus toward the Don, we are confronted by another of the disputed questions in ethnography. This relates to the independent or dependent origin of the Slavic peoples in their relations with the great Teutonic family. Were the Slavs and Germans involved originally in a common movement out of Asia? Were they still a common people in their progress from their Asiatic origin to their European dominions? If so, where and when did they part company in linguistic and institutional development? Which is the older of the two races? Which, if either, is derived

Question of the race connection of Teutons and Slavs considered.

from the other? Was the migration common to both, or were there *two migrations*, one Slavonic and the other Teutonic? These problems have been variously solved by different ethnographers, and the whole ground has been hotly contested since the question of race distribution assumed its present scientific aspect.

Branches and directions of the Teuto-Slavonic stem.

On the whole, it appears that the movement was common which carried these two races out of Asia into Europe. It may be safely alleged that the Teutonic and Slavonic peoples held together on their way to the north and far into the heart of Great Russia. It would be proper to call the whole line of progress from the Caucasus to the north, well up to the northern borders of the Russian empire, thence westward and southward to the borders of Poland, the Slavo-Teutonic stem. It certainly carried the volume of both races, both languages, both varieties of institutional forms. Above the sea of Azof, on the left as the migratory progress continued, a branch was thrown off into Sarmatia, from which that division of the modern Slavs, called Little Russians, have sprung. But the main line continued northward in the direction of the subsequent site of Moscow, and afterwards toward the gulf of Riga, on the Baltic. It was, however, to the south of the gulf of Finland, and perhaps nearly midway between that water and the northern bend of the Black sea that the final separation took place between the Germanic and the Slavonic races. In the meantime, a branch had been thrown off northward toward that collection of inland waters extending from the White sea to lake Ladoga, and another division to the west, into the country of the Letts.

Point of division of the two races; the Russian family.

If, then, we take our stand on the head-waters of the Dnieper, we shall not be far from the ethnic division on which was based the subsequent separation of the Slavonic and Teutonic peoples. The two stocks were both characterized for extreme fecundity and power of development. There are at the present time within the limits of European Russia and Poland about seventy-five million of people of Aryan descent. These may be divided into Russians proper, Poles, Bulgarians, Czechs, and Serbs, all of which are Slavonic in their ethnic origin.

The Russians are subdivided into Great Russians, Little Russians, and White Russians. The Letto-Lithuanian peoples are divided into Lithuanians proper, Zhmuds, and Letts, with a total of over three million. This is the summary of populations which have sprung in modern times from the single ethnic stem called Letto-Slavonic. The Great Russians themselves number forty-two million, and the Little Russians more than seventeen million. Besides the above peoples, the Græco-Roman population in Russia numbers considerably over a million, while the Germans, in admixture with the Armenians, Georgians, and Tsigans are represented by considerable communities.

Distribution of the Great, Little, and White Russians.

Geographically, the Great Russians are grouped in the states and provinces around Moscow, extending northward to Novgorod and Vologda, southward to Kiev, eastward to Penza and Vyatka, westward to the Baltic provinces and the borders of Poland. The Little Russians are distributed chiefly in Galicia and Bukovina. In general, they belong to the southern parts of Russia, next to the Caucasus. The White Russians are

distributed throughout the western governments of the empire. The Bulgarians inhabit Bulgaria Proper, Eastern Roumelia, and Roumania, and are scattered into Austria, Russia, and Macedonia. The other ethnic divisions are dispersed into the countries to which they have given their respective names —Servia, Lithuania, Croatia, etc.

Dispersion of the Germans; three branches of the race.

Second only in importance as to numbers and first in importance in civilizing energy are the Teutonic races which issued in common with the peoples described above from the Slavo-Germanic stem. A glance at the map will show that Europe is divided from southeast to northwest by the two great rivers Danube and Rhine, whose waters issue from the same upland region, in the central part of the continent. It was on the right bank of the Rhine, extending down to the Baltic from the great central region, that the Germanic nations were first distributed. As the left bank of that river and hitherward to the western parts of Europe belonged roughly to the Celtic race, so the right bank eastward to the Vistula was Germania.

Into this great region was extended and dispersed the Teutonic stream of immigration. Roughly speaking, the whole Teutonic stock was parted into three divisions, which correspond roughly with the modern linguistic distinctions of High German, Low German, and Scandinavian. In prehistoric times, however, one of the first distinct departures of the primitive stock was that which carried down the great race of the Goths into the valley of the Danube. They issued from the southern portion of the Baltic region, and appeared on the scene of their subsequent activities during the fourth century B. C.

The family known as Gothic has been somewhat unscientifically divided into the Vandals, the Heruli, the Rugii, the Gepidæ, the Alani, the Suevi, the Longobards, the Burgundians, and the Franks. On their arrival on the Lower Danube the Gothic race began to divide into the two major families of Ostrogoths and Visigoths, meaning the Eastern and Western Goths. The former had a habitation originally in Southern Russia, between the Dniester and the Don, while the latter held their territories from the Lower Danube to the Carpathian mountains. In course of time the Goths were pressed on their eastern frontiers by various invasions, until they were aggregated and heaped up on the left bank of the Danube, whence they ultimately burst into the Roman empire. After this event, as is well known, the Ostrogoths found an ultimate lodgment in Italy, while the Visigoths continued their progress into the Spanish peninsula and became a substratum of population in the modern ethnic development of that peninsula.

Analysis and distribution of the Goths.

The Franks appeared as an aggregation of Teutonic tribes on the Lower Rhine as early as the middle of the third century B. C. At the first they were confined to the right bank of the river, but in course of time passed over and began their settlements in the northern part of Gaul. They were ultimately divided into two families, known as the Salian Franks and the Ripuarians. It was the former division of the race that was thrown by impact on Gaul, and that was established within the limits of that country as a barbarian empire under Clovis and his successors. The Ripuarians spread southward and occupied first the right and afterwards the left bank of the Rhine, whence they carried their

Franks people the Rhine valley; the Vandal distribution.

incursions on the west to the Meuse and on the east to the Main. It was from the Ripuarian Franks that the Teutonic state called Franconia took its name. The Salians constituted one of the ethnic elements in the formation of the French people.

It will prove of interest to note only the ultimate distribution of the other branches of the Teutonic stock. The Vandals were essentially of this race, but had taken into their constitution Slavonic and Celtic elements. They belonged to the general division of Goths. One of their oldest seats was in the Riesen-Gebirge. Afterwards they occupied Pannonia and Dacia. In the fifth century of our era they played an important part in the overthrow of the Roman empire. In the Spanish peninsula they founded the state of Andalusia. Under Genseric they crossed into Africa, and there developed their greatest strength and nationality.

THE FRANKISH VANGUARD.
Drawn by Emile Bayard.

The Heruli were the earliest of the German races to make their way into Italy. There they established themselves under their great leader Odoacer, and the Herulian kingdom was the first barbarian empire created within the limits of the home government of Rome. The Gepidæ were likewise of Gothic extraction. Historically, they are first known to us in the third century B. C., in their territories on the Baltic. They also came into Pannonia, and were interposed for a while between the Ostrogothic and Visigothic divisions of the race. They

were joined to the armies of Attila, and were subsequently successful in gaining a province for themselves, on the Lower Theiss and Danube. Here they were finally overrun by the Longobards and the Avars, with whom the remnants of the race were amalgamated.

Movements of the Heruli and the Gepidæ.

One of the most powerful of the German migratory tribes was the *Suevi*. Their territories lay between the Rhine and the Weser. In their progress and development they spread southward as far as the Upper Danube. On the north they reached the coasts of the Baltic. It was with the Suevians that Cæsar had one of his hardest contests in his struggle for dominion north of the Alps. The Longobards, commonly called Lombards, were nearly related to the Suevic branch of the German race. From their seats in the valley of the Elbe they made their way into Italy, within the historical period, overthrew the Herulian monarchy, and established one of their own on the ruins of the empire. In later times they contributed their name to the modern state of Lombardy in Italy, and it is likely that their ethnic influence entered more largely into the formation of the northern Italian race than did the qualities of any other barbarian people.

Progress of the Suevi; the Longobards in Italy.

The Burgundians were a branch of the Gothic family, and first established themselves in Europe, in the country between the Oder and the Vistula. The Gepidæ drove them from their seats, and they sought refuge in the territory lying between the Main and Neckar. Here they were combined in common enterprises with the Suevi and Alani and the Vandals in their wars with the remaining powers of Rome. Afterwards they struggled with the Franks, by whom they were restricted to the province bearing their name. Such, in brief, was the European distribution of the principal barbarian nations of the Gothic stock.

Ethnic place and vicissitudes of the Burgundians.

Meanwhile, another division of the Teutonic race had made its way along the shores of the Baltic, and in Jutland, Friesland, Angleland, and in Hollowland had possessed themselves of the country and begun the formation of institutions. This is the so-called Low Germanic branch of the Aryan family. The tribal ramification in these lowlands was extraordinary. It was from this region that the Angles and Saxons and Jutes took their rise, and, in the fifth century, carried their battle-axes and spears into the forests of Britain.

Outspread of the Low Germans and the Norse.

From the southern coast line of the North sea the race next made its way into Scandinavia. Two branches of migration sprang from this region, one penetrating the great peninsula of Norway and Sweden, and the other making its way by water to Iceland. It was in the latter island that the Norse, or Scandinavian, race presented, and does until the present exhibit, the purest aspect of Scandinavian life and manners. There have always been such intimate race relations between the southern and northern shores of the Baltic that the Low Germans inhabiting the two countries have intermingled almost to the extinction of ethnic differences. But in Iceland the old Norse, or Scandinavian, stock has been allowed to develop according to its own laws into an independent race character.

Such, then, was the distribution of the great Teutonic and Slavonic races in the northern parts of Europe. It will be of interest to note *the extent of the complete*

dispersion of the Aryan family of men. On the east the Indic branch of the race reached the meridian of ninety degrees east from Greenwich. On the west the extreme limit of the primary Indo-European development was in Iceland and Ireland, under the meridian of ten degrees west, making a complete divergence east and west of one hundred degrees of longitude.

Extent of the dispersion of the Aryan family.

NORTHERN LIMIT OF THE ARYAN DISPERSION.—VIEW IN UPPER NORWAY.—Drawn by Myrbach, from a photograph.

It was a peculiarity of the Aryan race never to be deflected to the south; that is, in its westward movements. The Indican and Iranian branches of the family dropped into India and Persia respectively. In the latter country the race was dispersed as far south as Beluchistan, and in the former to the bay of Bengal, in latitude twenty degrees north. But turning to the westward branches of the Indo-Europeans, we find them invariably bending to the north. Perhaps the only exception to this general law was in the case of the Celts, who, from their somewhat northern range in Germany, turned to the southwest across the Rhine into Gaul, and thence continued their course in the same direction as far as the country of the Basques and Iberians in Spain.

General and exceptional movements of the Aryans.

The northernmost limit of the whole movement was reached in the upper parts

of Norway and Sweden, about the parallel of seventy degrees north. The migration thus, in its entirety, presents a band very nearly coïncident with the north temperate zone. The belt is forty-five degrees in width, reaching a little above and extending a little below the limits of the zone referred to. The next conspicuous feature of this great distribution is the fact that it is essentially European. The exceptions within the borders of that continent of peoples derived from any other than Aryan stock are so few and insignificant as to be neglected without hurt to the general scheme. Europe is Aryan, and the Western Aryans are Europeans.

Extent and boundaries of the Aryan belt.

It is, of course, not the purpose to extend the lines of race movement by tracing out the continental colonization and development of the two Americas by people of Indo-European blood, or to note the world-wide colonization which has been effected within the last two or three centuries by people of the same race. These secondary movements, if developed in this connection, would confuse the concept of the original or natural distribution of mankind in the prehistoric ages. There is a sense in which men have moved from place to place on the surface of the earth *unconsciously*. That is, the movement has been accomplished while the race was still in the unconsciousness of childhood. There is another sense in which civilization has *consciously* carried forward the work of peopling the earth. All the latter movements are of record in the open annals of authentic history, and with such development and expansion the ethnographer has not much to do. His work is primarily with those prehistoric movements in which the races of men were distributed, under the influence of instinct and environment, to their destination in different quarters of the earth.

Only conscious movements to be considered in migration.

At this point, then, we touch the limit of the primeval excursions and settlements of the Ruddy races of mankind. To these races we have given the general ethnic name of Noachites, but have chosen to define them more scientifically by the term Ruddy, as indicative of their color. We have now traced out the dispersion of the three families to which ethnography has assigned the popular and traditional names of Hamites, Semites, and Japhethites. We have seen the first dropping southward into a form of geographical development very similar to that which the Japhethites, or Aryans, have exhibited in the north. The whole scheme of migratory dispersion resembles the two sides of a leaf, having its stem between the Caspian and the Persian gulf, its point in the Atlantic west of the Pillars of Hercules, its left-hand side in Arabia and Africa, and its right division in Europe. The central lines of this leaf correspond in general with the movements of the Semitic races to the west. The right-hand lines are those of the Aryans, and the left-hand departures those of the Hamites.

General view of the dispersion of the Ruddy races.

The limits of the present chapter are reached when we have marked out the migratory movements by which they were distributed into their respective countries. It now remains to take up another general division of mankind, and to note in like manner the course which the Brown races have pursued on their way to their destination in the great arena of Asia, in the islands of the Pacific, and ultimately in the two Americas.

CHAPTER XXIX.—DISPERSION OF THE BROWN RACES.

IF it were not for the Black races of mankind distributed in Equatorial and Southern Africa, in Australia, and Melanesia, the primitive seat of the human family might perhaps be discovered. If the observer should take his stand upon the mountains of Western Afghanistan, he would not be far from such a crossing and divergence of ethnic lines as might indicate the original center from which the human race was distributed into all quarters of the globe. This is to say that in the country between the Afghan borders and Beluchistan the Brown races of men, as well as the Ruddy races, seem to take their rise. All the Mongoloid varieties of mankind can be traced back to this geographical center, and we have already seen that the Noachite, or Ruddy, race had its origin somewhere in the same region.

Common source of Ruddy and Brown races may be found.

It will not do, however, to press these indications too far. The Dravidian peoples, also brown as to their color, had a departure somewhat further south, on the coast, between the mouth of the Indus and the Persian gulf. In fact, the origin of this branch of the human family appears to have been nearly coïncident with what may be supposed to have been the seat of the pre-Noachites. But a greater obstacle in the way of determining an ethnic center for all the divisions of mankind is encountered in the case of the Black races, who seem not to have originated from this region at all.

Dravidians appear to have had a separate line of departure.

Some ethnographers, going beyond the limits of determined fact, have attempted to find the origin of the Brown races in the Indian ocean; that is, in a submerged continent formerly occupying the bottom of that sea. This theory has, no doubt, been put forth with a view to reconciling existing facts with the hypothesis of a single origin for the whole human race, and it may be admitted that such a hypothesis would fairly explain the facts to which it is applied. In the present state of knowledge, however, the line of demarkation between ascertained truth and hypothetical explanation must be strictly observed; not with a view to the denial of the possible truth in the supposition of a submarine continent under the Indian ocean, with its Lemuria, a thing indeed probable; not with a view to the positive assertion of such an opinion *as* the truth, but simply to maintain a definite boundary between knowledge and conjecture.

Hypothesis of common origin for all in Lemuria.

We must, therefore, content ourselves to note the issuance of the Brown races from Beluchistan, and to trace from that origin the course of the tribal migrations which ensued. It may be inquired by what right or for what reason the ethnographer fixes upon such a locality as the point of departure for great races inhabiting distant quarters of the earth, particularly since the movement which has distributed those races to their respective countries was prehistoric, and therefore not to be ascertained by the usual methods of proof. It may be well, at this point, to satisfy the reader as to the validity of that course of reasoning

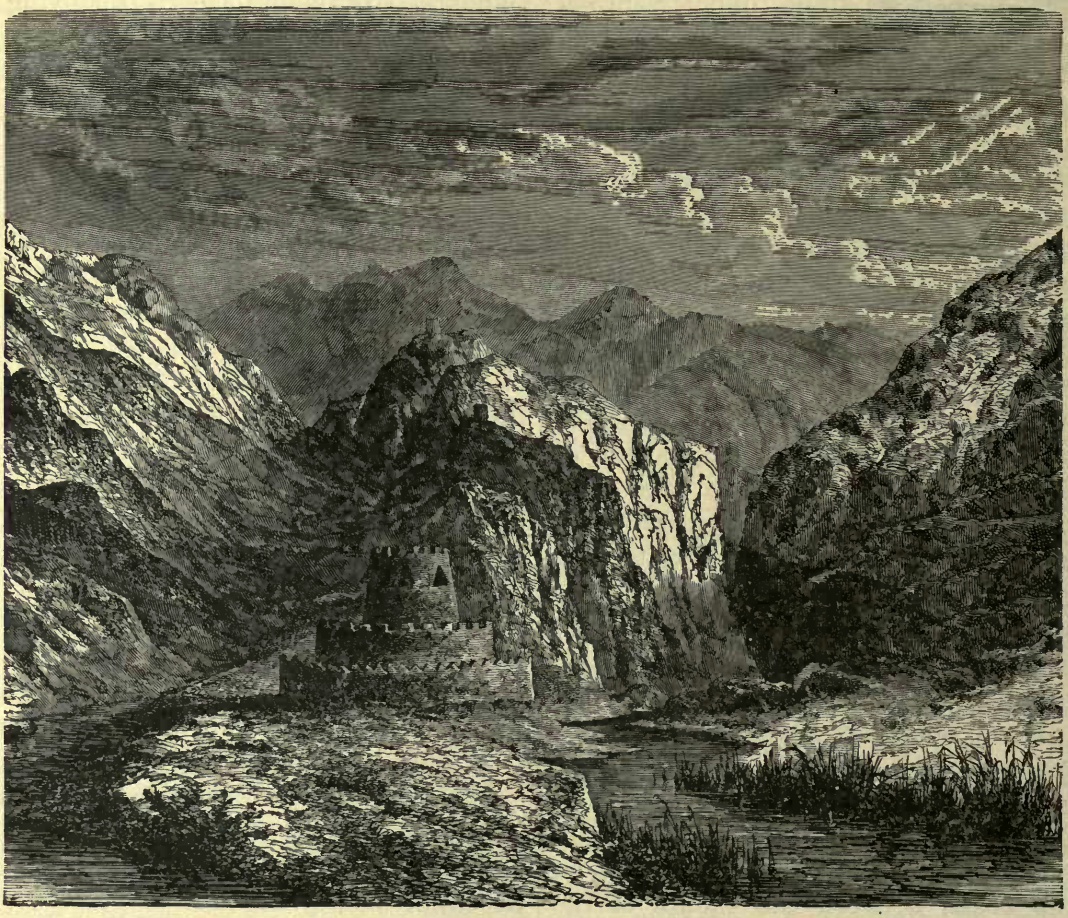
Criteria for determining the direction of migrations.

which leads inevitably to the conclusion of certain race origins and divergencies beyond the borders of authentic history.

In what manner the language and institutions of Rome may be restored.

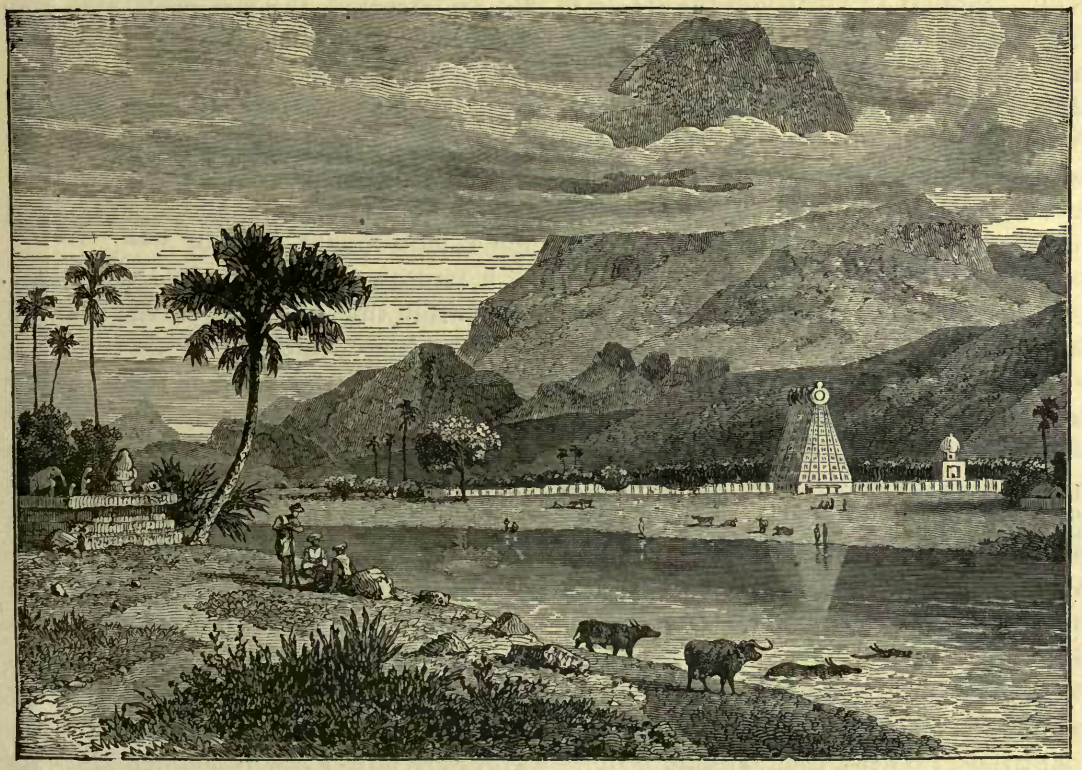
In the first place, the testimony of language is nearly always available in carrying the inquirer backward to a point which he could not otherwise reach. Suppose, for instance, that all authentic knowledge of the great political power called Rome was obliterated from the annals of mankind. Suppose that every book in which a trace of the Latin language and literature is recorded were utterly destroyed. Suppose that the memory and tradition of the people called Romans had passed completely from the minds of men. Would it be possible, under such circumstances, to revive, by means of existing languages, a knowledge of the Latin race, of its institutions, its practices, and, in general, its history?

Undoubtedly such a revival could be easily produced. Take the six modern Roman languages, called Italian, French, Spanish, Portuguese, Wallachian, and Provençal, and examine their structure and peculiarities. It is found that they have been originally deduced *from some common speech* having a grammar and vocabulary of a determinate form. Out of the study of these six languages that old grammar and vocabulary can be *recon-*



ROUTE OF THE DRAVIDIAN DISPERSION.—GORGE AND FORTRESS OF ARDERBEND.—Drawn by A. de Bar, after a sketch of Blocqueville.

structed, and when reconstructed, they are Latin. If Latin, then there was a Latin race that spoke it. If a Latin race, it had its seat and its institutions. The seat of the race can be discovered geographically by tracing back the lines of departure by which the six nations referred to have reached their respective countries; and the institutions of Rome can be largely redeveloped by means of the etymological hints and inherent revelations of the descendent languages.



LAND OF THE DRAVIDIANS.—CAPE COMORIN, INDIA.

In like manner we may group together Latin and Greek and Old High German, Celtic, Slavic, Persic, and Sanskrit, and, by means of a similar comparison of these great varieties of speech, can revive the grammar and vocabulary of the primitive Aryan race lying, in all of its activities, completely below the day-dawn of history. These are but illustrations of a *method* which may be universally pursued. Wherever two kindred tribes are found on the earth an examination of their language and of their geographical environment will lead, if carefully carried out, to a discovery of their common origin, or of the divergence of the one from the other. By this and analogous processes, strictly scientific in their nature and peculiarly interesting as methods for the increase of human knowledge, the ethnic lines of the prehistoric nations may be traced over continents and across seas until, by their conjunctions, convergencies, and parallelisms, we are able to determine with approximate accuracy the earliest movements of the human race.

The whole Aryan group may be reconstructed likewise.

We will begin the examination of the migrations of the Brown races of men by tracing out the course of the Dravidians, these being the southernmost of the

ethnic divisions which we are to consider. Perhaps they were the oldest. At any rate, their origin appears to have been nearer to the Indian ocean than was the line of the Asiatic Mongoloids. As already intimated, the point of departure between this branch of the human family and the primary stem of the Ruddy races may be fixed in southern Beluchistan. From this region the Dravidian migratory movement was toward the east, into the valley of the Indus. It is probable that the place at which the Brown tribes first entered the country was near the junction of the several streams which, converging from the north, inclose the Punjab. From this region the dispersion of the race began, eastward across the uplands of Northern Hindustan and southward into the peninsula proper.

Direction and Character of the Dravidian dispersion.

It can not be doubted that from the region here described the great country between the bay of Bengal and the Arabian sea received its original populations. It will be remembered that in the preceding book we had occasion, in speaking of the incoming of the Old Aryans into the Punjab and their dispersion hence through Hindustan, to refer to the preöccupation of the country by aboriginal tribes. These, then, are the peoples whom the Aryans found and overcame on their entrance into India. It was, perhaps, the first contact of the Ruddy races of the northwest with the Brown peoples of the southeast, since the original dispersion—if such there were—of the race.

Invading Aryans overcome the aborigines of India.

No historical record has been preserved of the conquests or other measures by which the Aryans became dominant in India. But there are the best of reasons for believing that the original population was spared by the stronger people, and was absorbed or amalgamated into the Hindu races of after times. One of the principal evidences of such amalgamation is found in the *color* which people of this region of the earth subsequently assumed. The modern Hindu is a living witness of some prehistoric change in complexion, in all probability the direct result of the admixture of the primitive Brown races of the peninsula with the dominant Aryan conquerors from the north and west.

The conquerors are modified by the subject races.

The fact to which we have just referred of a permanent modification in the color of the skin by the admixture of races, and the establishment thereby of a typical complexion different somewhat from that of either of the original peoples from which it is derived, are general phenomena which recur, under like circumstances, in different parts of the world. In all probability every race now existing on the face of the earth has been somewhat modified in its complexion by the absorption of foreign elements, and it is only by a recognition of this fact and a reference of it to its true causes that the ethnographer has been able to discover that underlying all the shades of complexion in the world are only a few fundamental colors from which every intermediate hue has been obtained by admixture and amalgamation.

Probability that all races have mixed complexions.

For a long time after the attempt was first made to classify the human race on some rational plan, the color of the different families of men was regarded as *an incident of climate*. It was believed that races transferred from one region to another suffered a change of complexion under the influence of sun and air.

Color of the human skin not derivable from climate.

Beginning with the general fact that the darker races are, for the most part, equatorial in their distribution, it was concluded that the Black races had become so from the high heat, the scorching sunlight, and the arid atmosphere to which they were exposed. It was assumed that the White races belonged to the higher latitudes and that the Yellow and Brown peoples have been made so by their respective geographical, or rather climatic, environment. It has remained for more careful investigations to show that these opinions have but little foundation in fact.

Variations of color traceable to primary ethnic conditions.

It appears, then, that instead of the colors of the different races being dependent upon the latitude and other conditions of the country into which the tribes were dispersed, the different complexions of the primitive peoples were almost independent of their position with respect to the equator. The relation, or correlation, between color and climate is neither constant nor exact in any particular. It has been found that some of the Indians of Upper California, under the latitude of forty-two degrees north, are as black as the Negroes of Guinea; and it is also noted that those Negroes who are at a departure of as much as fifteen degrees from the equator are much more nearly absolutely black than those who dwell along the equatorial line; that is, in this region the race *seems to grow whiter* with its approach to the center of solar influence.

Evidence of the insufficiency of climate to make complexion.

In the southernmost parts of North America, namely, in the extremes of Mexico lying between the latitudes of fifteen degrees and twenty-three degrees north, many of the aboriginal peoples were of a reddish or olive complexion, almost as light as that of the Ruddy races. The Esquimaux of the extreme north of Europe and America are very dark as to their complexion, while the Finns, who are almost as near the polar regions as it is possible for men to live, are comparatively white. The concomitant facts of light hair and blue eyes, along with the lightness of skin color, belong to many tribes that are dispersed well toward the tropical regions. The Afghans of India and the Taureg tribes of the Sahara desert and the Amazonian nations of South America are of this character. Humboldt has pointed out the fact that the South American Indians inhabiting the plateau of the Cordilleras, clearly within the torrid zone, are identical in color with others whom he had observed as far down as the forty-fifth degree of south latitude. We are thus constrained by undeniable facts to refer the extremes of complexion in the human race to an origin other than climatic environment. In fact, the races of men *differ in color absolutely*, and have done so independently of their geographical position from the earliest ages in which human phenomena began to be observed and recorded.

Course of the Dravidian lines in India and Ceylon.

Returning from this digression, we find the lines of distribution for the Dravidians to be drawn around by the valley of the Ganges, skirting the southeastern coast of the Indian peninsula to its southern extremity. Thence the race passed, by easy migration, into the island of Ceylon, where it received perhaps its most characteristic development. It is here that the modern *Veddahs*, of whom mention has been previously made, display the old race character in its recent aspects. In the island, as well as on the continent, however, the dominant Aryan peoples have pressed

upon the natives, until the latter now represent only about thirty per cent of the whole population. In the prehistoric age all the aborigines of Ceylon were of the same Brown family with the people of Southern India and Eastern Beluchistan. At the present time the Dravidian population is compacted in the eastern and southern parts of the island, where the condition and character of the race are still subject to the study of travelers and scholars.

MODERN DRAVIDIANS—KOTA TYPES.
Drawn by P. Fritel, from a photograph.

Returning to what may be called the intersection of the original Brown and Ruddy races of mankind in Afghanistan, we find that the first principal Asiatic stream of the former family was the Malayo-Chinese departure. This took its course in the direction of the Upper Punjab, and crossed directly to the east into Thibet. There appears, however, to have been thrown off to the southeast, into the Himalayas, a branch of this family, which is at the present time represented by the Lohito tribes, between the Ganges and the Himalayas. These are evidently Mongoloids, and must thus be in race alliance with the Thibetans north of the mountains. A second stream carried down the Burmese to their destination on the east coast of the bay of Bengal. From this line there appears to have been deflected, somewhat above its intersection with the Lan-Thsang river, a secondary movement, tending almost directly to the southeast and terminating in two branches, the one in Southern Annam and the other on the gulf of Tonquin.

The Malayo-Chinese departure; Lohitos and Burmese.

By this latter movement the Annamese peninsula, between the Cambodia and the South China sea, was populated. It appears, however, that the Siamese peninsula, west of the Cambodia, received its ethnic stream from a departure which was made high up in Thibet, and that this latter migratory line crossed the Annamese dispersion on its way to the south. Another peculiarity of the ethnic distribution of Siam is found in the fact that the populations south of latitude fifteen degrees north all partake of the character of the Polynesian Mongoloids, as distinguished from the Asiatics. Ethnographers have therefore agreed to regard the extreme of the peninsula and the adjacent islands of Sumatra and Borneo as having re-

Doubts respecting the populations of peninsular Asia.

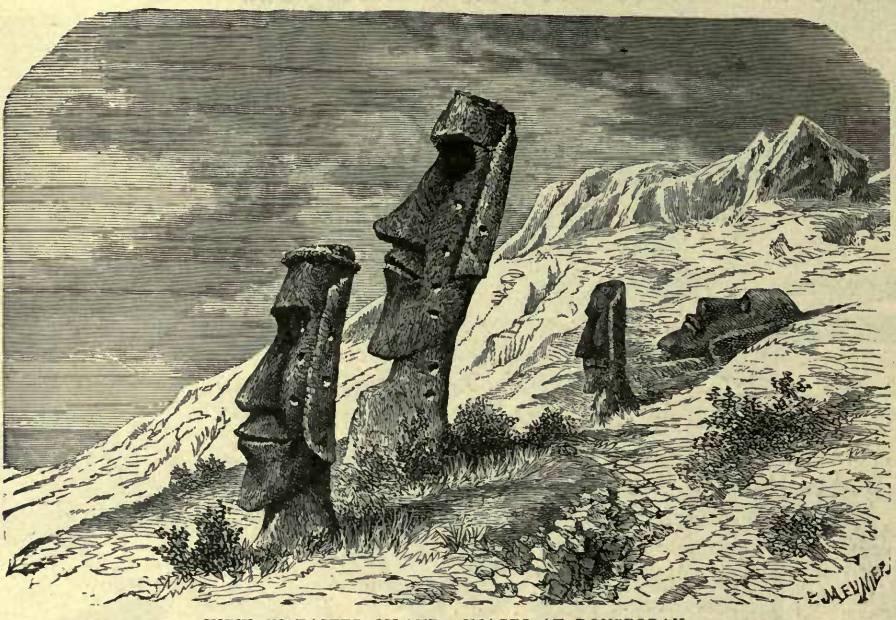
THE MALAYO-CHINESE DISPERSION.—Nomads of the Oasis of Merv.—Drawn by Y. Pranishnikoff, from a photograph.

ceived a Polynesian stream either turned back by reversal from the Micronesian archipelago, or else deduced by a change of ethnic character from the Malayo-Chinese stem. The Polynesian line which we are here considering may be traced through Sumatra and Northern Borneo, from which the migration appears to have turned northward into the Philippine islands, and thence to the east into Micronesia.

Here it is that we begin to consider the great problem of the original peopling of the islands of the South Pacific. Except in Melanesia, all of the great group lying between the coast of China and South America are inhabited by people of the Brown race. They are manifestly allied with the Asiatic Mongoloids and the Dravidians in their ultimate origin and descent. No method more rational, more consistent with the facts can be devised than to suppose their distribution into the great archipelago from the smaller group of islands directly east of the Philippines. This group is generally known as the Caroline islands, or Micronesia. From this point the archipelago eastward is exceedingly dispersed through a distance of more than twenty-five degrees of longitude. Yet the progress northward into the Ladrones could have been easily made.

Problem of the peopling of Polynesia.

From the Caroline group eastward to the Marshall and Gilbert islands was a more extended and difficult voyage. Thence the line continued to the southeast, through the Ellice group to Samoa, where there was an evident bifurcation into two great lines of progress. Meanwhile, from the Ellice a stream of island migration appears to have been carried out to the Phœnix islands, where we may suppose the movement in *this* direction to have ceased. From Samoa one line of departure was to the west of south into the Friendly islands, then southwest to Norfolk, and then southeast to New Zealand. Here, in the North island and the South island, were distributed the ocean tribes from which has sprung the remarkable race of Maoris, of whose character and peculiarities a sketch will be presented in a subsequent book.



VIEW IN EASTER ISLAND—IMAGES AT RONOBORAK.
Drawn by E. Meunier.

Outreaching ethnic lines from Caroline and Gilbert islands.

Eastward from Samoa the line of

migration was carried to the Society islands, whence it again divided north and south for two great departures toward the continents of America. The southern line passed down to the Austral islands, and then southeastward to the Oparo group, one hundred and forty-five degrees west from Greenwich. From this point, about latitude twenty-eight degrees south, the line of departure, through seventy-five degrees of longitude, appears to have been almost directly to the east, through the Elizabeth islands, the Easter group, Saint Ambrose, and finally to the coast of South America, about the center of Chili.

Dispersion from the Samoan group and the Marquesas.

The other branch of Polynesian dispersion from the Society islands was borne to the northeast, to the Marquesas group. On this line there was a departure to the right, from which the Low Archipelago may be supposed to have been peopled. From the Marquesas the island migrations bore backward to the northwest, through more than twenty degrees of latitude, passing, by way of Maldon and Fanning, to Carson. Here the course was again changed to the east of north, to the Sandwich islands. From this noted ocean group the migration continued islandwise to the northeast, passing through the sparsely scattered points for a distance of twenty degrees of longitude, to the Pasaries. From this group the line was carried away through Henderson on a long curve a little to the south of east, until it entered the gulf of California and touched the coast of Mexico.

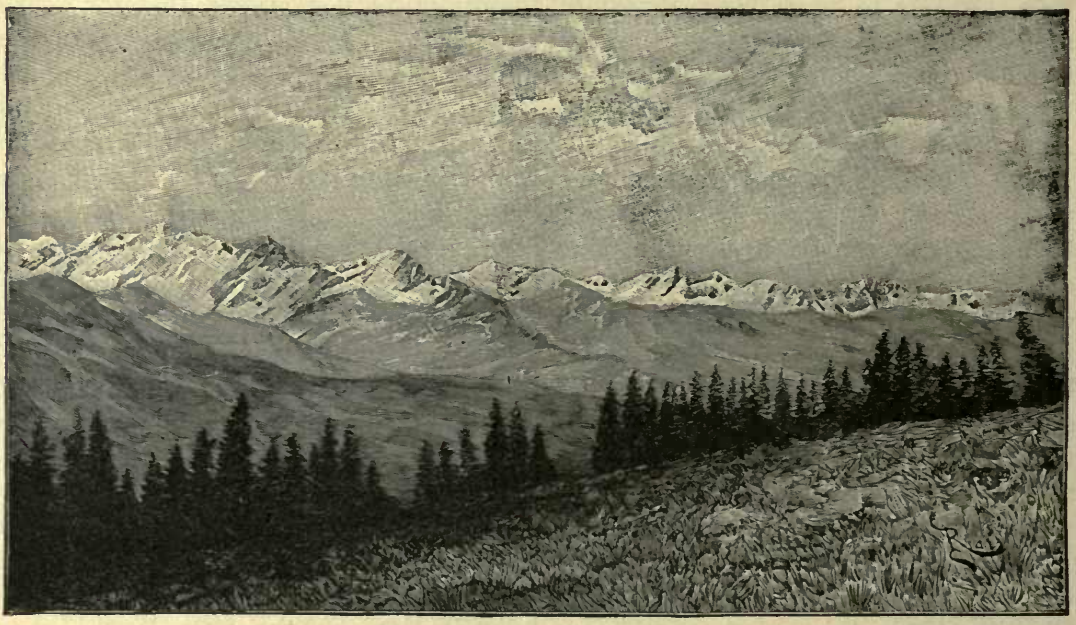
These migratory movements which ethnographers have attempted to trace through the South Pacific represent, of course, only *the major lines of dispersion* along which the Polynesian Mongoloids were carried to their almost infinite distribution in these limitless waters. It was essentially a progress from island to island. The stages were sometimes easy and the movement by no means incredible. In other parts of the migrations the distance was great from point to point of departure and lodgment. Nor may it be easily conceived how the progress was continued by races whose skill in navigation must have been limited by the conditions of savagery. It must be borne in mind, however, that for weeks and months together the waters of the South Pacific are as placid as an unruffled lake. The trade winds are equable and of constant direction. The climate is mild in the last degree. Under such conditions even savages, in open boats, with a modicum of sail, would drift, as in a dream, for hundreds, perhaps thousands, of miles. These are the circumstances which *make it possible* for the ethnic distribution through the islands of Polynesia to have been effected in the manner above described.

Easiness and difficulty of the progress through Polynesia.

It is not the purpose, at this point, to develop the dispersion of the Polynesian races through the two continents of America. The distribution of the various branches of the human family in these continents will be considered when the Asiatic Mongoloids have also been traced to the western shores of North America. Grave questions arise in the mind of the inquirer relative to the certainty or uncertainty of the movements by which the first men were distributed on our continent. In the present state of knowledge the bottom problems arising in this connection must be passed by as unsolved. The best that ethnography can do in the premises is to trace out the possible, even *probable*, approximation of the Polynesian and Asiatic Mongoloids

Probable derivation of the races of the New World.

to the western parts of the two Americas. It is certainly *not impossible* that the race of man may have thus made its appearance in the New World, and may have been disseminated from ethnic stocks which were derived from the northeasternmost parts of Asia and the islands of the South Pacific. The immediate task before us is to resume the consideration of the migratory lines by which the Brown races were dispersed through the larger parts of Asia.



ROUTE OF THE MONGOLIAN DISTRIBUTION.—THIAN-SHAN MOUNTAINS.—Drawn by Riou.

We have now followed the lines of distribution from Thibet, in the southeastward direction, to the Annamese and the Siamese peninsulas. Returning to the point of departure we find from the valley of the Lan-Thsang a full stream of migration, tending directly toward the east and into the heart of the Chinese empire. From the head-waters of the Lan-Thsang to those of the Yang-tse the migratory movement carried the true Mongolians into the valley of the great central river of China, where they were dispersed, and where they have since developed into the type of Chinese proper. All the races south of the Hoang-Ho and north of the Yang-tse-Kiang are of this common stock, which is one of the most distinct and persistent types of mankind.

Outbranching of the Asiatic Mongoloids.

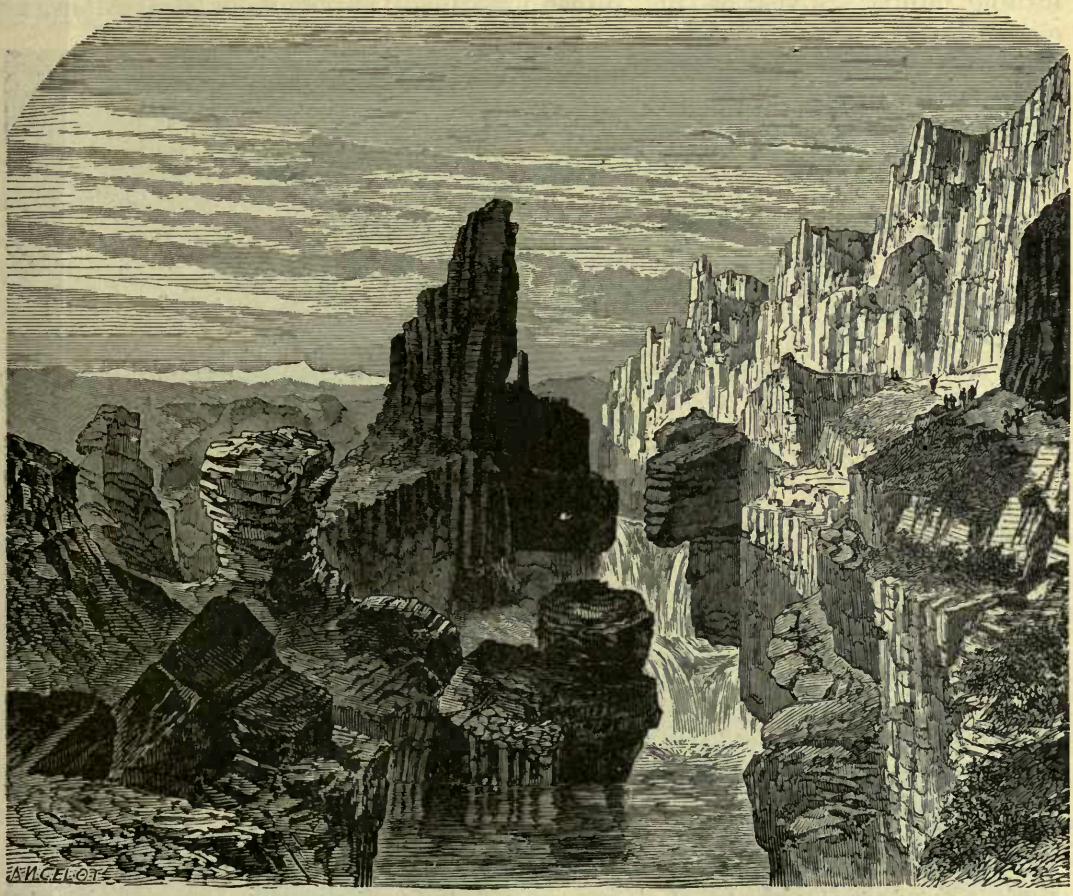
The East Mongols, as distinguished from the Chinese and the Malayo-Chinese, flowed from a branch of the Asiatic Mongoloid family known as the Northeast division. Its course from Afghanistan was through Eastern Turkistan and into that part of China which is known geographically as Mongolia. This country occupies the great region between the Amoor and the Hoang-Ho, with the exception of the eastern part, next to Corea and the sea of Japan, which is called Manchuria. The people known as Manchus are also descendants of the northeast stream of Asiatic Mongoloids.

Distribution of the Northeastern Asiatics.

It is in this region, near the mouth of the Amoor, that the great movement of the Brown races of men in their progress

eastward was checked and turned back into the almost limitless regions of Northern Asia. First of all the Mongolian stream, after crossing to the north of the Amoor, was reflected into a loop, and the migratory movement was resumed toward the head-waters of the Hoang-Ho. It appears that the reverse line representing the departure of this race reaches throughout the entire breadth of Asia, having its origin as a separate ethnic division in the Russian province of Amoor, north of the river of that name, and extending westward through Mongolia into Turkistan. The main migra-

Dispersion of the Brown races deflected in the Amoor valley.



CHUTE OF TCHIMBOULAC.—Drawn by D. Lancelot, after Atkinson.

In the upper valley of this great river the Calmuck Tartars were deposited, as the result of the backward migration just described. A second stream was deflected from the main line of this movement and contributed the Buriats, holding the country south of lake Baikal. More extraordinary still was the departure from the backward curve of the Mongoloids of the Turkish division of mankind. It tory line seems to have passed south of lake Balkash, and to have thence continued its western progress across the Ural and the Volga to the northern shores of the Black sea. On the whole, this progress of the Turcomans is one of the most remarkable among the ethnic movements of mankind. The principal families deposited at the extreme of the migration on the line we are now considering were

the Nogaians, whose territory reached from the Volga to the Caucasus and the Black sea.

Before attempting to define all the dispersions of the Turks in their backward movement into Western Asia, it is desirable to note some of the other returning ethnic curves of the Brown

Race lines of Samoyeds and Ural-Altaics.

gration from the departure of these two peoples was, for the Samoyeds, somewhat south, through the region between lake Baikal and the desert of Gobi; thence the line extended westward until it crossed the river Obi, near its junction with the Tobol. West of this great stream began the dispersion of the so-called Turanian, or Ural-Altaic, na-

OFF THE COAST OF COREA.—Drawn by Theodore Weber, after Zuber.

races to the north of the Turkish line. From the same origin with the Turks themselves, in the country north of the principal bend of the Amoor, extended westward another great stream of migration, which bore at first the combined volume of the Samoyed and Ural-Altaic nations. The course of the migrations, whose development covers, in general terms, the whole region between the Baltic and the Obi. From the central line of migration westward, having its termini among the Finns and Lapps in the extreme north of Europe, many subordinate migrations turned to the left and right, the principal of which

were the streams which contributed certain Mongoloid families in the valleys of the Ural and the Volga, and the departure on the south which ended with the Esths, on the eastern coast of the Baltic.

Distribution of the Twagi and the Juraks.

Returning to the point of division between the Ural-Altaic and the Samoyed families east of lake Baikal, we find the latter stream pursuing its way westward, dropping one branch of the family in the valley of the Upper Angora, and carrying its volume thence northward to the Twagi tribes, east of the gulf of Obi, under latitude seventy degrees north. The main stream continued westward to about the meridian of eighty degrees east from Greenwich, where another branch was thrown off northward, contributing the Juraks to the peninsula west of the Yenisei river. Still a third departure entered the Yalmal peninsula, where the Juraks also bear witness of the Mongoloid origin. The westward course of the Samoyed dispersion ended between the meridians of forty degrees and fifty degrees east, with the tribes of Vanuta and Laghe.

Outline of the Tungusian dispersion.

If then once more we take our stand in Manchuria, we shall find still another great curve, to which the ethnic name of Tungusian has been given, bending in like manner close along the sea of Japan, and thence turning to the west and north. It was from a branch of this Tungusian stem bearing off to the south through Manchuria that the Coreans were deduced, and an extension of the same migration carried into Nippon the primitive Japanese. The Ainos, also of Yezo, on the north, may be a derivative of the same branch which here perhaps reaches its limit oceanward. The main line also divides in high latitudes, throwing out branches, especially on the right, which find the limits of their departure among the Yataks, the Tunguses, and other arctic tribes, in the extreme limits of Northeastern Asia. From this same origin, moreover, the eastern movement was continued through the great Asiatic peninsula which stretches out between the Arctic ocean and the North Pacific toward Behring strait. There can be little doubt that the Mongoloid tribes inhabiting this region, such as the Lamuts, the Itelmes, the Koriaks, and others, are of the same Mongoloid origin with the Tungusians, the Manchurians, the East Mongolians, the Ural-Altaics, and the Samoyeds, the difference being chiefly in modifications of development effected by the peculiar geographical environment into which the eastern division of the race was thrown on its progress to the northwestern extremity of North America.

Such, in brief, is a sketch in outline of the distribution of the Brown races through the continent of Asia. We have now traced the Polynesian lines to the western coasts of South America and Mexico, and the Asiatic Mongoloid lines through the eastern extension of Northern Asia and the Aleutian islands, to the northwestern shores of North America. Before beginning an account of the distribution of these various Mongoloid races in the New World, it will be desirable to notice some exceptional lines which they seem to have followed, even to the extreme west of Europe.

Outer circuit of the dispersion of the Brown races.

Question of the ethnic descent of Basques and Iberians.

It is claimed by ethnographers that the Basques and Iberians, the ancient nations of the Spanish peninsula, were of Mongoloid extraction. The question has been much debated and the argu-

ments fortified with every variety of proof. On the whole, it may be conceded that these primitive peoples of Spain were allied in their race descent with the Mongolians of the Asiatic continent. Between the straits of Gibraltar, however, and the main line of the original Mongoloid dispersion where it passes northward through Beluchistan, there have been found no Mongoloid tribes, or indeed any distinct traces of their presence. In some manner, then, we may assume that the Basques and Iberians reached their destination in the extreme west. By what route they did so must remain conjectural. It may have been by transnavigation of the Mediterranean. But the greater likelihood seems to be that in very primitive times a branch put off to the west from the pre-Mongoloid stem, passing through the countries of the Hamites about the head of the Persian gulf, across Upper Arabia, and through the whole extent of North Africa to the straits, and thence into Southern Spain. Such a line may, at any rate, without undue straining of the hypothesis, account for the presence in the west of Europe of nations evidently allied in their ethnic descent with the Thibetans and Malayo-Chinese.

Place of the Esths in the scheme of races.

The presence of the Esths between the Letts and Finns on the eastern shores of the Baltic has also constituted a problem for which a solution has already been found in the deflection of a southern line from the Ural-Altaic migration in Northern Europe. Some ethnographers have not hesitated to mark out a route of migration from the country of the Basques in a northeastern direction, across Gaul and Germany, into Esthonia! But, considering the general course and character of the movements by which Central Europe was peopled, the latter supposition appears to be altogether unwarranted.

A general comment or two will be appropriate as to the character of the dispersion of the Brown races in the countries which we have thus far considered. In the first place, it is remarkable, in view of the early preferences which the Mongoloids showed for warm climates, that Africa has been untouched by their migrations. The nearest approach to this continent which the Brown races has made is that of the Polynesian Mongoloids in Madagascar. It is in evidence that from the island of Java a branch of this race made its way through the Indian ocean, touching perhaps at the southern point of Ceylon, and thence passing in a southerly direction from island group to island group to its destination and development in the natives races of Madagascar. To these peoples ethnography has assigned the ethnic name of Malagasy.

Ethnic connections of the Malagasy.

In the second place, it may be noted that the Brown races, in the primary stages of their distribution, appear to have been drawn by cosmic forces *toward the east*. In general, Southern Asia received its population from movements in this direction. These movements continued until the Pacific was reached, and was even carried forward through the Polynesian archipelagoes until, as we have seen, the race lines probably touched the western shores of the New World. But on the continent the eastern migrations of the Mongoloids seem to have fallen into a whirl in Manchuria, and to have been bent backwards, as above described, through the whole extent of Northern Asia and even far into Europe. The world-wide extent of these movements can with difficulty be appre-

General and special directions of the Brown dispersion.

ciated or understood even by the student of history, to whom great continental stretches and far-reaching developments are familiar. As compared with the limited dispersion of the Hamitic and Semitic nations, or even with the greater and more populous distribution of the Aryans in the small continent of Europe, the Asiatic and Oceanic dispersion of the Mongoloids appears to the scholar in ethnography and history as world-wide and limitless.

We come, then, to look briefly at the primitive distribution of mankind in the two Americas. For many reasons the ethnology of these continents is beset with special difficulties. The aboriginal peoples inhabiting them were uncivilized races in the preliterary stages of development. Their monuments had already fallen into the domain of archæology before the coming of the White races. The peculiar family relation existing among nearly all the tribes of the New World tended to confuse the lines of race distinction and to blur the whole ethnographic outline. The household was generally based upon a system of marriage differing but little from polyandry, the result of which was to converge the lines of descent through the woman instead of the man. The tribes were largely nomadic in their disposition. War and conquest were frequent, and one race, by means of aggression and victory, was many times superimposed territorially on another.

Difficult ethnography of the American aborigines.

Behind all this confusion there appears to the ethnographer the shadow of the bottom question relative to *the primary origin* of these races. We have agreed to regard the Polynesian islands and Northeastern Asia as the sources of the American aborigines, but it may be frankly confessed that so much has not been established by irrefragable proofs. Nevertheless, the affinity and diversity of languages prevalent in the New World give many evidences, when compared with Polynesian and Asiatic tongues, of a common paternity; and ethnic and tribal lines have been in many parts sufficiently maintained to indicate with tolerable certainty the direction of migrations and the ultimate derivation of these barbarous peoples. The physical peculiarities of the Red men, the primitive Mexicans, and the Esquimaux have also been of advantage in

Ultimate derivation of the Indian races.

COAST OF MADAGASCAR AND VIEW OF MAJONGA.—LIMIT OF THE BROWN DISPERSION.
Drawn by De Berard.

clearing up many questions relating to the first people of North America; and the persistency of manners and customs—that great fact which has often come to the rescue of embarrassed scholarship—has thrown its constant light on many obscure parts of the questions here before us. We shall now attempt, following the hypothesis of an Asiatic and Polynesian origin, to delineate the course of distribution of the primitive races through the two Americans, and their development into distinct families of the human species.

In the extreme northwestern portion of North America we find a rather widely dispersed race, to which ethnographers have given the name of Orarians. In general, they are distributed in that peninsular part of the continent which extends from the meridian of about one hundred and twenty degrees west to Behring strait. It is the affinity, almost unmistakable, of these people with the Yakuts of Northeastern Asia, particularly with the Koriaks and Chuk-chee tribes, that has warranted the conclusion of an Asiatic derivation for the Orarians.

Place and affinities of the Orarians.

The line, therefore, marking the dispersion of the northeastern stream of Asiatic Mongoloids into these extreme parts of Asia may well be drawn across the strait and distributed into the peninsular region of Northwestern North America. In like manner, the clear relationship of the people inhabiting the southern part of the Alaskan peninsula with the Pacific peoples of the Aleutian islands, gives warrant for the derivation of the former from the latter. It is in this Alaskan portion of the country that ethnographers have placed the Orarians proper, while to the north, in Upper Alaska, that is, between the Yukon and the Arctic ocean, we have a distribution of the Western Esquimaux.

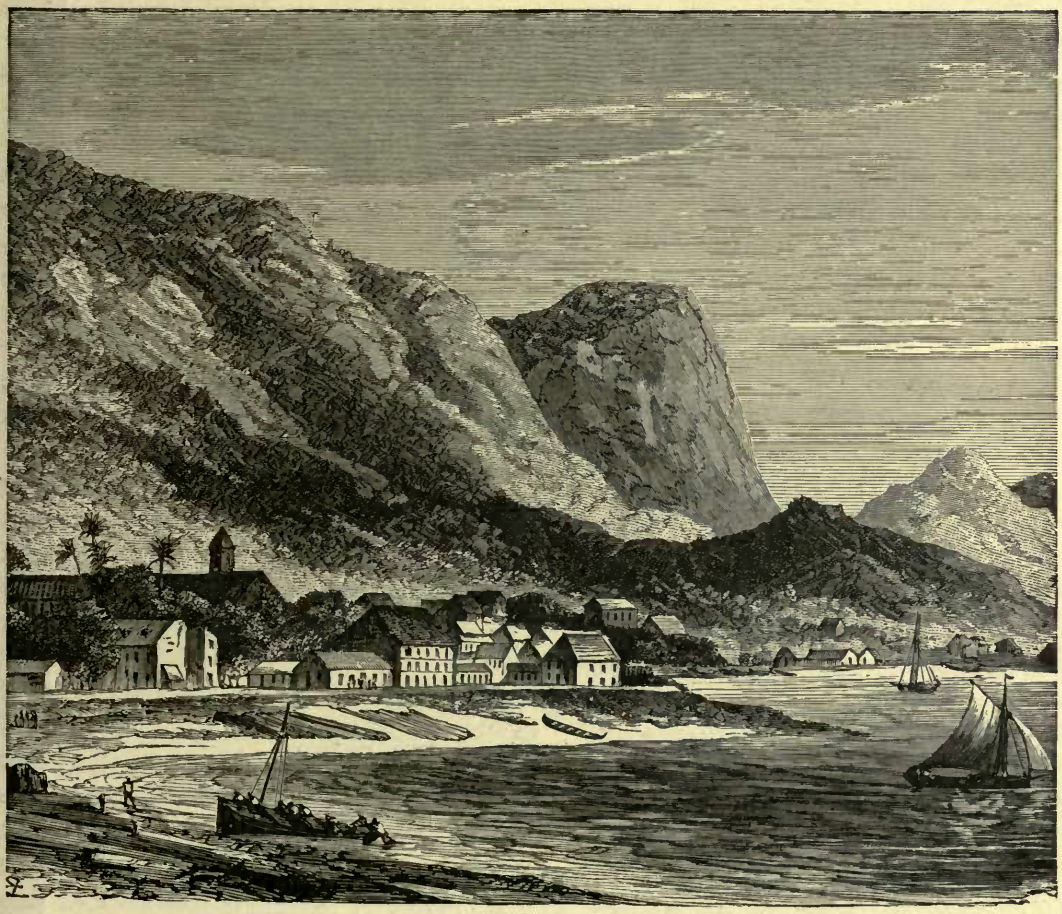
Easy derivation of Alaskan aborigines from the Asiatics.

ROUTE OF THE ORARIAN DISPERSION.—PERIL STRAITS.—Drawn by Theodore Weber.

Further to the east and central to the peninsula are the Tinneh races, or at least a branch thereof, while to the south of these and around the coast of

the Great archipelago are located the Tlinkets and Nasses. The outlying islands are inhabited by other branches of the same race called the Yakuts, the Sitkans, and the Hidahs.

By the time that the ethnographer has advanced thus far to the east, in following the lines of the Asiatic Mongoloids *the Polynesians* who had come primarily to the shore of the continent in the region of Old California. Advancing still further to the east, and following the same Asiatic Mongoloid line of dispersion in the extreme north, the inquirer will make his way above the region of the Great Bear and Great Slave lakes,



ROUTE OF THE CHONTAL DISPERSION SOUTHWARD.—Coast of Panama.—Drawn by De Berard.

continentward, he finds himself confronted with what appear to be returning races of Polynesian extraction. The Tinneh family above referred to are a people different apparently in race characteristics from the other stocks of Alaska, and it is generally conceded that they have been carried into this remote position by *a returning migration of*

Polynesian Mongoloids mix with Asiatic derivatives.

in the country of the widely spread family called the Tinneh. The territory occupied by this division extends from about the meridian of one hundred and twenty-five degrees west, eastward to Hudson's bay and the gulf of Boothia. Its limits northward are the Arctic ocean and the countries of the Eastern Esquimaux, whose line of dispersion reaches the coast of Labrador. On the

south, the great river and lake system which discharges its waters through the Nelson into Hudson's bay mark the boundaries of the Tinneh.

It is in the latter region that the returning lines of the Polynesian Mongoloids are again encountered. The whole movement of the latter races here appears from the east to the west, while the Asiatics flow from the west to the east. The main migration of the Eastern Esquimaux may be regarded as extending through the arctic archipelago, perhaps by way of North Devon island, or Ellesmere land, across Smith's sound into Greenland, where the final distribution of this family has its limits.

General course of Polynesian and Esquiman migrations.

TYPE OF AMERICAN MONGOLOIDS—THE INDIAN BARRE.
Drawn by Riou.

It will be seen by an examination of the map that this region is under the meridian of fifty degrees west from Greenwich, while the original source which we have assigned to the Brown races in Beluchistan is very near the meridian of sixty-five degrees east, from which it is manifest that the direct dispersion east and west of the Asiatic Mongoloids has covered a longitude of *one hundred and sixty-five degrees;* and if we take into account the multifarious departures to the right and left—the endless curves and windings by which such a movement would be carried forward from its initial departure to its final destination—we shall see that the Brown races of men have virtually encircled the earth in their wanderings!

Meanwhile, the migration of this same family of Mongoloids had extended down the Alaskan coast to Vancouver's island. Here, in the northwestern part of what is now the United States, the great family of the Selish was distributed. By hypothesis, a deflected branch of this family may be traced eastward and thence southward to about the fortieth parallel of latitude and the ninety-fourth west from Greenwich. From this center several lines of departure may be noted upon which, in the southern parts of the United States, the old nations of Choctaws, Creeks, and

Distribution of the Selish; the Mexican races.

Natchez Indians were developed. Another line, perhaps, passed from the same origin to the west, thence southward into Mexico, and from the latter dispersion we gather the old races of the Toltecs, the Aztecs, and the Ottomies, who played so important a part in the quasi civilization which the Spanish invaders discovered and destroyed.

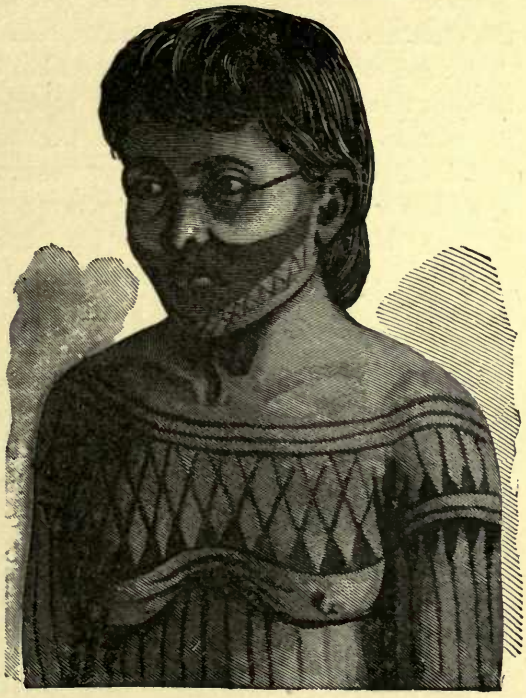
From another branch of the same dispersion arose the Cholulans. Still southward the course of migration was continued into Central America, where the nations called the Mayas, the Nahoas, the Quiches, and the Chontals were distributed north of the isthmus. We may even continue the same line of southern departure through the isthmus of Panama and down the whole coast of Western South America. The native races along this extended seashore, from Panama through Peru and Chili to Patagonia and finally to Terra del Fuego, have been found to be allied throughout with the Asiatic Mongoloids rather than with the Polynesians. The greatest of these families are perhaps the Aymaras, the Quichuas, the Araucanians, the Pampas, and the Patagonians, named in the order of the descent from the north. The Fuegians mark the extreme of this dispersion. The lines indicating the progress traverse the entire extent of the two continents, besides many meanderings, the limits of which could hardly be determined in terms of current geography.

Origin and dispersion of the Central Americans.

At this point it may be well to note also some special developments north of Mexico. The Californians, together with the Shoshones, the Mutsun, and Yuma nations, may be regarded as dispersions from the north.

Place of the Shoshones; derivation of the Six Nations.

It may be, however, in the case of the Shoshones, that they proceeded from an eastern migration, having its origin in the center of the United States. There appear to have been a good many interchanges of character in the central nations of North America, the Asiatic Mongoloids taking on the character of Polynesians, and vice versa. The great nations of the Eastern United States



TYPE OF AMERICAN MONGOLOIDS—MONDURNCA INDIAN WOMAN.

the Onondagas, the Oneidas, the Senecas, the Mohicans, may be referred ultimately to the same stock with the Cherokees, the Muskogees, and other families of the Southeastern United States, and these in turn seem to have originated in the Antilles, and to have arisen ultimately from a Polynesian source.

It will be well, therefore, at this point to take up the course of dispersion of the Polynesian races from the center of the west coast of South America and follow the same in its divisions through that

continent. Perhaps the first deflection from the main line of eastern departure was to the right, into the countries now occupied by the Argentine Republic. The native races of this region are known by the name of Guaycurus. They belong in general to the country between the mouths of the La Plata and the Rio Negro. The coast nation of this part of the continent are known as the Puelches. A second migratory stream put off about the head-waters of the La Plata, taking its course eastward, and was thence deflected to the coast, in Uruguay, where the people called Charraks bear evidence of the dispersion. Higher up, the Guarani were distributed, and from this region the main line extended in a course nearly parallel with the sea, into the heart of Brazil. The mountain races to the left of this line are known by the name of the Parexis, while the still greater family of nations between the river Amazon and the San Francisco are called Tupis. The latter are subdivided into the Crans, the Crens, and the Gucks, with many subordinate tribes and ramifications.

The Polynesian Mongoloids in South America.

One branch of this same Polynesian migration turned from this country up the valley of the Amazon and was distributed among the initial streams of that great river, while another branch crossed the Amazon to the north and contributed the Caribbean nations in their various families and tribes. It appears that from the coast at the mouth of the Orinoco, almost directly northward, and thence westward through the islands to Hayti, and thence by way of the Greater Antilles to the southern extremity of Florida, the line of migration was carried, depositing the Seminoles in the latter country, and thence bending eastward through the coast regions of the United States. It is probably true that the kinship and affinity of so great numbers of the Indian tribes of North America with the Polynesians of the South Pacific must be referred to this almost infinite line of departure which we have been following from Sumatra and Siam across the South Pacific to the western coast of South America.

Origin of the West Indians and the Seminoles.

Hereafter, in noticing the peculiarities of the Indian races of the New World, we may have occasion to speak again of their geographical positions and mutations. It is believed that this cursory outline of the general movements by which the New World was probably peopled with inhabitants belonging to the Brown races of mankind, will be sufficient to give an adequate idea of the development of these races. The great peculiarity which impresses itself most upon the mind of the ethnographer and historian is that *all* the aboriginal families of these continents belonged to the Brown family of mankind. In those primary movements which may be called *natural*, as contradistinguished from the somewhat *artificial* migrations and colonizations which are projected from civilized countries into the barbarous territories of the world, not a single Black or Ruddy tribe of men reached the shores of either America.

Universality of the Brown dispersion in the Americas.

It is, indeed, a reflection well calculated to astonish the inquirer that the most progressive and energetic peoples of the world have not, until times most recent, carried the lines of their dispersion into the remoter parts of the habitable globe. It is true that the Aryan races have at present extended their languages and institutions—even their blood progeny—into the uttermost parts of the earth, but

Astonishing extent of the migrations of the Brown races.

these movements do not belong to the same class of phenomena by which the primitive, unconscious peoples were distributed to their several destinations.

If we look at these primary movements only, our surprise may well be great at the indescribable extent of the wanderings and ethnic dispersions of the Brown races of mankind and the comparatively small areas in which the progressive and civilizing peoples have borne themselves and their institutions. With a map of the world drawn on Mercator's projection before the student who desires to inform himself of the prehistoric movements of mankind, the great, well-nigh universal, diffusion of the Brown races throughout all Asia, several parts of Europe, and the whole of Polynesia and the two American continents must impress his mind with the striking character and singularity of these human phenomena.

Before dismissing the subject of the distribution of the Brown races, we will point once more to the outer geographical limits of the dispersion in different parts of the world. The migratory lines in South America drop to the extremity of the continent in latitude fifty-five degrees. The Fuegians represent the nearest approach of the Brown races to the south pole. The next limit in the same direction may be found in the Chatham islands and the southern parts of New Zealand, extending from latitude forty-five degrees to fifty degrees south. As already noted, the western stream of this family terminates in Spain, at about ten degrees west from Greenwich. The eastern boundary of the Greenland Esquimaux may be given at about twenty degrees west. The northern excursions of this race have reached to at least the eightieth parallel north; from which we may gather that through *three hundred and fifty degrees of longitude* and *a hundred and thirty-five degrees of latitude* the descendants of the Brown races of mankind have been dispersed by the natural forces to which barbarians in their migratory movements are subject!

Outer periphery and limits of the Brown dispersion.

CHAPTER XXX.—DISTRIBUTION OF THE BLACK RACES.

AS compared with the complexity and extent of the dispersion of the Brown races of mankind, the Black divisions and departures of the human family are simple and easy of apprehension. They are confined, in general terms, to that portion of the African continent lying south of the twentieth parallel of north latitude, and to Australia and the Micronesian islands. The fact that the Indian ocean lies between these African and Australian dispersions of the race, and that the presence of Black peoples is not discoverable in any other of the great continents, except by reason of recent civilizing movements, introduces the one great difficulty in determining the origin whence both streams of the race have flowed. It is this circumstance, moreover, which has in a great measure fortified the hypothesis that under the Indian ocean lies the sub-

General character of the Nigritian distribution.

merged continent of Lemuria, the ancestral home of all the races of men.

Granted the existence in prehistoric ages of such a continent, and the subsequent dispersion of mankind on the monogenetic hypothesis becomes not only plausible, but easy and natural. But the continent is a supposition so far as the present knowledge of mankind is concerned, and we are obliged to consider the African and the Australian distribution of the Black races as separate phenomena, one presenting itself with a westward and the other with an eastward migratory tendency.

Lemuria necessary to unify the Black dispersion.

As already remarked, the beginning of the Black populations of Southern Africa seems to have been on the eastern or peninsular coast where the continent juts out into the Indian ocean, about the parallel of ten degrees north. It has been stated above that most of the peoples of this coast region as far west as about the thirty-seventh degree of longitude are of Semitic origin, with perhaps a mixture of Hamitic stock. Such peoples are the Somali, the Donakil, the Galla tribes, and others, inhabiting this peninsular part of Africa. It is somewhat to the west of these, therefore, that the actual dispersion of the Black peoples seems to have its center. This is to say that the lines indicative of the migration of the Black races from

Origin of the ethnic dissemination of the African races.

MEURKA.—Drawn by Y. Pranishnikoff.

the eastern coast of Africa are for a distance of about ten degrees from the ocean hypothetical, the country through which they pass being now occupied by tribes of another race.

It may be conceded that the oldest branch of the Negro family, upon the consideration of which we are now to enter, are the Fundi-Sudanese, who occupy the country between the Blue and the White Nile for some distance south of their intersection. It is likely that this was the first territorial dispersion of the family which afterwards spread through the larger part of the continent to the west and south. The Fundi seem never to have removed very far from their original seats. They founded here the kingdom of Sennaar. They have the same peculiarities of person and tribal character with the Negroes of Southern and Western Africa, and are certainly in affinity with them by race descent.

Place and distribution of the Fundi-Sudanese.

At this point it may be well to designate the principal branches into which the Negro race proper is divided. The northern stem, next to the Fundi just mentioned, carried into Central Africa the Negroes of the Sudan and perhaps the Fulah races lying to the north. Some trouble has arisen as to the classification of the latter peoples, and there are traces in their color and other peculiarities indicative of an admixture of Hamitic blood. By the Sudanese, however, the Fulahs are regarded as of the same race with themselves, and, on the whole, the evidences of kinship with the Black peoples on the south are sufficient to warrant this classification.

Kinship of Fulah and Fundi races; subordinate families.

Several subordinate families were thrown off from this same northernmost stem of Black dispersion. Among these are the Haussa tribes, the Sonhrays in the valley of the Niger on the extreme west, the Jolofers between the Senegal

BAMBARRA TYPES.—Drawn by Emile Bayard.

and the Gambia on the coast. There is no doubt that the Hamitic line of migration, bending to the south out of the Moorish states of Western Africa, penetrated the valley of the Niger, and that this stock has contributed somewhat to modify the Black peoples in the north of the Sudan.

The Sudanese proper are likewise divided into many peoples, distributed from the Upper White Nile, across the continent to the westward, to the Mandingos and other tribes of Guinea. Glancing over the whole field of Central Africa, between the twentieth parallel of north latitude and ten degrees south, we may, on a geographical basis, note four principal ethnic divisions of peoples:

Distribution of th. West Sudanese and Guineans.

1. *West Sudan and Guinea.*—In this region there are beside the Fulahs six other groups, distinguishable by sufficient differences to warrant a classification. The Mandingos, with ten or twelve subordinate tribes, occupy Upper Guinea and Southern Senegambia. The Woloffs have seven divisions, or tribes, which are distributed inland between the Senegal and Gambia rivers. The Felups are divided into twelve tribes, or nations, scattered over the territory between the Gambia and Sierra Leone. The Liberians have seventeen tribal divisions scattered along the Grain coast and the Ivory coast. The Ewe group consists of ten different nations, and are distributed along the Gold and Slave coasts. The Ibo group also embraces ten subdivisions, having their territories in Benué and along the Lower Niger. The Sonhray family, with many subordinate tribes, occupy the country along the Middle Niger, from Timbuctu to Gando. The Fulahs, already described, are divided into eight nations, inhabiting the eastern parts of Senegambia and distributed eastward to the Baghirmi country. All these peoples except the Sonhray and Fulah nations speak dialects of a common language, but the latter peoples appear to have each a distinct vernacular.

2. *Central Sudan and the Chad Basin.*—In this region there are five separate groups of peoples. The first are the Adamawa group, with some sixteen tribal branches, belonging to Upper Benué and scattered thence eastward to Logo. The second division, called the Tubu nations, embraces twelve tribes, inhabiting Tibesti, Kanem, and the countries extending to the northern part of Darfur. The third, or Logon, group includes about fifteen branches, inhabiting Bornu, Lower Shari, and the Chad islands. The fourth group, called the Baghirmi, is divided into fifteen nations, occupying the lower and middle parts of Shari and the territories eastward to Runga and Darbanda. The fourth, or Waday, group, including a vast number of tribes, occupy the country of Waday and the districts eastward to Darfur.

Central Sudanese and tribes of the Chad Basin.

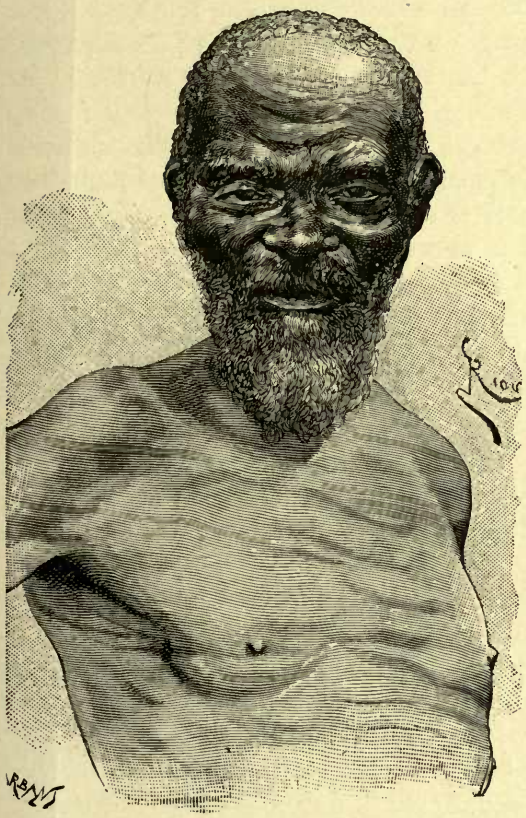
3. *East Sudan and Upper Nile.*—In this region there are four race families. The first, known as the Darbanda group, has eleven tribal divisions, occupying the country of Upper Shari and the territory eastward to Dar-Fertit. The second family of tribes, called the *Fur* group, have about seventeen nations occupying the country of Darfur and Kordofan, between Waday and the White Nile. The third group, called Nilotes, are divided into more than twenty tribes, living along the White Nile and its tributaries, eastward to Kaffa and Gallaland, and southward to Uganda. The fourth group of tribes are known as the Zandey, and are better organized as a nation than any of those above enumerated. They

Place of the East Sudanese and the Nilotes.

live about the Welle, and extend southward to the Lualaba.

The above three general divisions are all included under the general head of Sudanese, and are all Negroes — though considerably differentiated in ethnic character—except in so far as they have been modified along the northern and

Ethnic traces of the Hamites among the Nigritians.



BANTU TYPE—CHIEF N'DOUMBA.
Drawn by Riou.

western borders by Hamitic influences. It has already been noted that the Fulah nations, especially the West Fulahs, have been influenced not a little in their race development by the impact of the Hamitic migration, turning from the north into Senegambia. We now come to the fourth general division of the Negro race.

4. *The Bantu Family.*—This great race occupies South Central Africa, between the Sudanese on the north and the Kaffirs and Hottentots on the south. The Bantus have been classified, according to such distinctions as they present, into five ethnic groups. These are arranged principally on the lines of geographical locality: first, the Zulu-Kaffir group, embracing many tribes, are scattered through Zululand, Natal-Kaffraria, and in the region northward toward the great lakes of Eastern Africa; second, the Central group, divided into about sixteen nations, occupy the Upper Orange river, Transvaal, the shores of lake N'gami, and portions of the Zambesi. The Eastern group, also including many subordinate tribes, fill the territories on the east coast from the equator southward to the edge of Delagoa, and westward to lake Nyassa; fourth, the Equatorial group, including more than twenty nations, fill the regions of the great lakes, the upper part of Lualaba, and the country southward to the Lokinga mountains; fifth, the Western group, including about forty nations, are distributed along the west coast of the continent, from Damaraland northward to the Cameroon mountains, and eastward to the twentieth meridian of longitude.

Classification and subdivisions of the Bantus.

Within these vast regions, almost incomprehensible in their extent and character by people of the Western continents, there are distributed about one hundred and thirty million of people of pure Negro origin, besides about twenty million who have received, from one circumstance or another, the traces of foreign blood. These are the parts of the earth out of which the conscienceless states of the Middle Ages, and the great nations of modern times as well, have gathered their cargoes of human

Africa the Patria Dolorosa of the world.

chattels for the slave markets of the world. It is the region of infinite sorrows, to which the inhabitants of a better universe might point with shame, as to the *Patria Dolorosa* of all planets, upon which the stronger races of mankind have preyed with the cruelty of tigers and the gluttony of wolves.

If we resume the consideration of the migratory lines by which the widely dispersed races of the Sudan and the Bantu countries were distributed, we shall find one great departure turning to the south, from the country included between the Blue and the White Nile, and bearing down the eastern coast of Africa the primitive races of that region as far as the Zulus and Coast Kaffirs of the south. It appears that this branch of the dispersion was limited to the country between lake Nyassa and the sea, thus constituting a marked division between the coast Negroes of Eastern Africa and the Hottentots of the central and western parts of the continent.

Limits of the Zulu and Kaffir dispersion.

In the district immediately east of the Victoria Nyanza the migratory line seems to have bifurcated, a western branch putting off from the Coast Kaffir division and extending around lake Tanganyika and into the heart of the Bantu country. It was by the ramification, very extensive and multifarious, of this line that the Bantu nations and the great family of the West Kaffirs were distributed. The dispersion continued to the western coast of the continent, the ramifications in this region reaching from above the equator to the parallel of twenty degrees south. On the lower coast, however, the Bantu tribes were somewhat restricted to the interior by a line of Hottentot migration from the south, which distributed the Obongas and other tribes between the Kaffirs and the sea.

Ethnic relations of the Coast Kaffirs and the Bantus.

Such, then, in general terms, are the limits and extent of the Negro dispersion of mankind. Geographically, its southernmost point is with the Zulus, under the parallel of thirty degrees south. Its northernmost departure is with that ethnic line which carried the Jolofers to their place on the south banks of the Senegal, in latitude twenty degrees north. The eastern divisions of the Negro family are conterminous with the African coast adjacent to the Indian ocean, and the western distribution of the race is along the shores of the Atlantic. Measured by meridians of longitude, the dispersion reaches from fifty degrees east to twenty degrees west. The whole area, therefore, included by the dissemination of Negro races, extends through about fifty degrees of latitude and seventy degrees of longitude, being, in general terms, coëxtensive with Central and Southern Africa.

General boundaries of the Nigritian distribution.

We come, in the next place, to consider the dispersion of the Hottentots. These constitute the remaining major division of the Black race in Africa. It is claimed by ethnographers that the line of migration which carried this people into the south extremity of the continent entered from the side of the Indian ocean at a point on the coast somewhat below the entrance of the Negroes. We have, however, in the case of the Hottentots the same uncertainty that confronted us in the case of the Negro race. This is to say that Hottentot tribes have not been found, within the historical era, in that part of the country where they are supposed to have entered. The line from the coast, running in a southwesterly direction between lakes Tanganyika and Nyassa, is carried *by hypothesis*

Race origin of the Hottentots considered.

through more than twenty degrees of latitude before the borders of the Hottentot dispersion are reached. Such is the theory. All probabilities, however, point to the incoming of these tribes from the direction indicated, and their affinity with the Negroes fully warrants the assumption of a common origin with them.

Where the Hottentots and Bechuanas are distributed.

It is not until the inquirer reaches the valley of the Upper Zambesi in his journey across Southern Africa from the east that he comes upon the first tribes of Hottentots. They are virtually limited in their actual distribution to the country south of the Zambesi. The first nation of importance is the Makololo people, on the right bank of the river and in the central part of the country. They have the Negro Ovambos and Bundas on the west and the Coast Kaffirs on the east. The Makololo may be regarded as the oldest existing branch of the Hottentot race, though it is in evidence that in former times they extended much further to the east, and that they occupied the country from which they were subsequently expelled by the Kaffirs and other Negro tribes.

BECHUANA TYPE—A PAHOUIN.
Drawn by Riou.

The next branch of the race is found on the head-waters of the Gariep, or Orange, river, and is known by the ethnic name of Bechuanas. Some ethnographers have been disposed to make them a race of different origin from the Hottentots. It can not be denied that they are distinguished from the aborigines of Cape Colony by several important characteristics. The nation has been considerably compressed by wars with the people of the south and with the Kaffirs on the east; and in recent times the Boers have established themselves within the Bechuana territory.

Subordinate tribal divisions of the Hottentots.

The family of Hottentots are, like the Negroes further north, divided into many subordinate tribes, of which the Bassutos are the principal. They have their territories to the west of the Quathlamba mountains. A second tribe is called the Batlapi, having their habitat on the borders of the Kalahari desert. A third family, known as the Barolong, dwell to the north of the last named people, but these have been nearly exterminated in warfare with the Kaffirs. Still north of the Barolong are the Bangwaketse, while the Bahurutse have their territories close alongside. The Badoana are scattered on the north coast of lake N'gami, and the Bakwains occupy the hill-country whence the rivers Notuani and Marqua descend to the coast. These are the principal tribal divisions of the Hottentot family. In the extreme south, however, the most characteristic of all these races, the Bushman and the Namaqua are found, whose names have been synonyms for one of the lowest types of aboriginal life known in the annals of existing races.

There are not wanting evidences, sufficiently conclusive to the ethnographer, that the peoples whom we are here considering—Negroes and Hottentots—are among the most ancient races on the face of the globe. A single fact may be cited, or rather repeated from a former chapter, of the monumental delineation of Negroes among the captives of the primitive Egyptians. All the race characteristics of the two peoples were already distinctly developed. The ethnologist of to-day could not detect any radical mark of difference between the Negro as he is depicted among the sculptures of the Egyptians or unwrapped from the mummy cases of their tombs and the living specimen of the same race taken from the heart of Bantuland. But the Negro of the sculptures and he of the valley of the Livingstone are separated in time by a period of hardly less than six thousand years. Yet *before Egypt was Egypt* the Black race was disseminated in Central Africa, and was in all probability at that remote prehistoric epoch not different in characteristics and tendencies from what it is to-day.

Indications that Negroes and Hottentots are primitive races.

Still further away from the historical era are the primitive Hottentots. All the ethnic qualities of these people point to an extravagant antiquity. An argument would not be far to seek from these premises in favor of the evolutionary hypothesis of the human race, and the assignment of a primitive, or indigenous, race center to the southern parts of Africa. The cranial capacity of the Hottentot is considerably less than that of the Negro, as the Negro's bulk and weight of brain are less than those of the Turanians. Following the same line of development we note the still more extended brain evolution of the Indo-Europeans, reaching its maximum in Europe and North America. In what direction soever these hints, drawn from the natural history of man, may lead, we may safely conclude that the Hottentots are the oldest and least developed of all the races which we have thus far attempted to trace in their migratory movements. No sketch of their characteristics as a people is here attempted. It has been the purpose in the current chapter merely to mark out the course of dispersion and distribution by which the Black races of Central and Southern Africa have reached their respective destination.

Probability that the Hottentots are least developed of mankind.

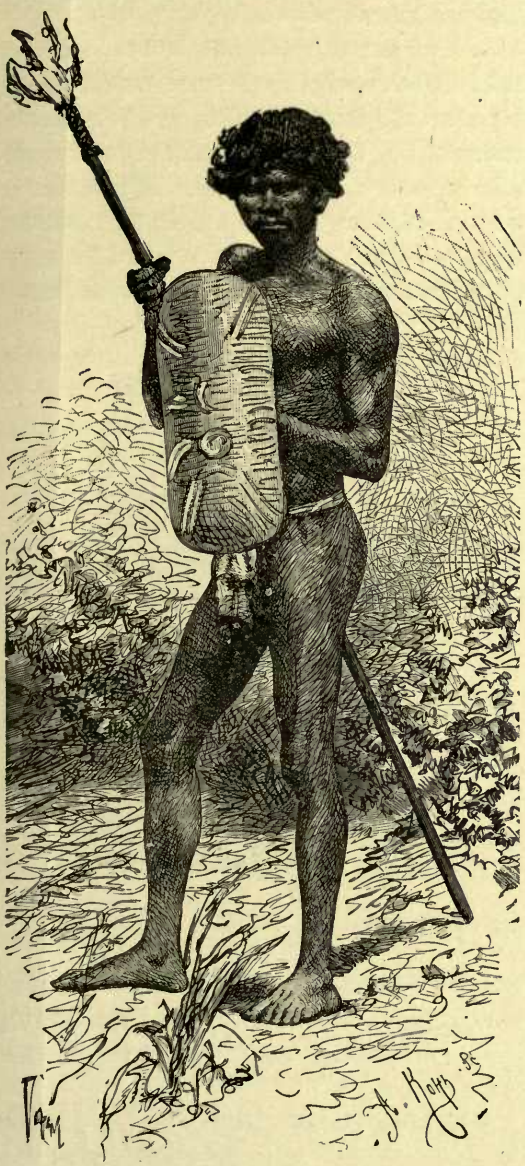
It now remains to notice the migratory movements of the primitive Australian branch of the human family. Viewed as a whole continent, Australia presents in its aborigines only a single type of people, to whom ethnographers have given the name Australians. If there be any trace at all of another race in the great island continent, it is on the extreme eastern borders where the Papuans of Tasmania may have left some evidences of their presence or at least their transmigration.

Homogenity of the Australian aborigines.

If the inquirer should begin his investigations from the standpoint of Australia, he might well conclude that the native races are indigenous to the country, being apparently without derivation from any other race. In color, it is true that the primitive people are in affinity with the Negroes and Hottentots, but their general characteristics and personality would seem to set them apart from almost every other type of mankind. It has been agreed, however, that, proceeding on the monogenetic hypothesis, that is, on the supposition of one common origin for all the races of men, the

The Australians should be classified with the Nigritians.

Australians may best be classified with the Black races of Africa, and that their incoming into the island should be reckoned from the northern coast.



AUSTRALIAN TYPE—JOKKAI.
Drawn by Tofani.

Ethnography has not hesitated to trace backwards from this point, by way of Java and thence across the Indian ocean to Southern Hindustan, the prehistoric line of Australian dispersion. This, of course, is done to carry out the ever-present supposition of a submerged continent in the region between India and Africa. Thus much being granted, it is easy to develop the line of probability by which the primitive Black tribes of Australia may have made their way from Lemuria into the country of their present occupancy. We shall therefore follow the hypothesis to its legitimate conclusions, and regard the Australian branch of mankind as an eastern deflection from a parent stream, which was common in its origin with the Negritic and Hottentot divisions on the other side of the Indian ocean.

Lemuria seems necessary to the supposed distribution.

It appears, then, that from the northwest coast, near the gulf of Cambridge, or Arnhem's land, the primitive Australian migration was extended by divergencies through the island in three different directions. The first extended laterally from north to south to the coast in the vicinity of Spencer gulf and the gulf of St. Vincent. The second branch turned to the west coast, which it followed as far as the valley of Swan river, and was thence extended to King George sound. These divisions were subordinate, however, to the third ethnic branch which turned to the east, near the head of the gulf of Carpentaria, and was thence parted into several divisions, losing themselves in the modern Queensland. It appears that New South Wales was populated by tribes from the Upper Darling, and that the whole of Southeastern Australia was filled from the same general source.

Lines of the Black dispersion in Australia.

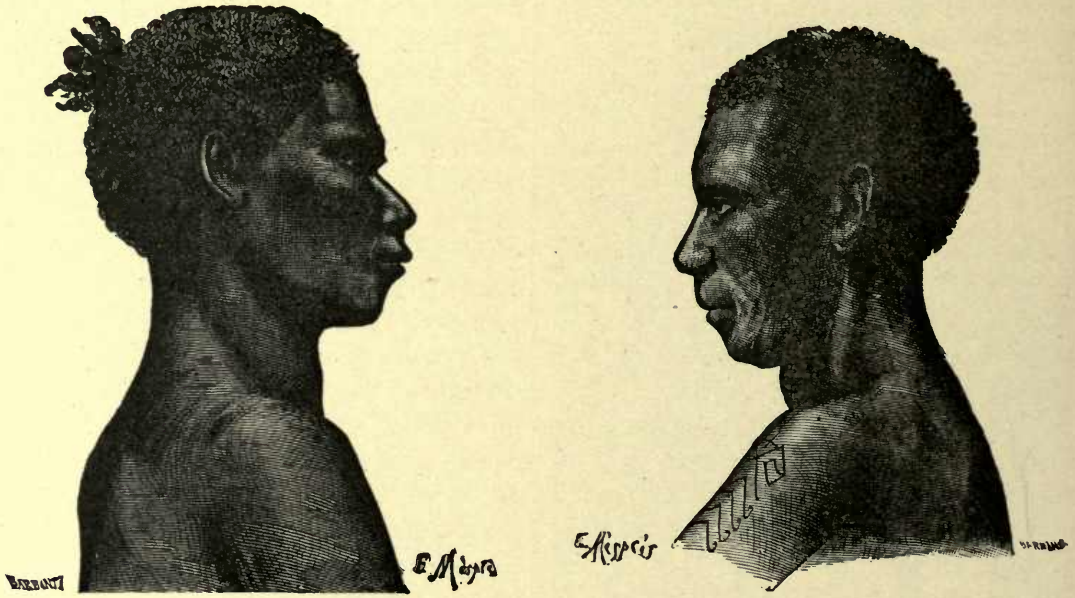
The inquiry will again suggest itself *by what means* these prehistoric movements have been indicated to the ethnographer. What are the sources from which he has drawn his conjectures and

Valid grounds of ethnographic hypothesis.

proofs? In the first place, a comparison of the different dialects spoken by the native Australians indicates sufficiently their affinity and common origin in some single parent linguistic stock. But secondly, the general community of manners and customs, the identity of the barbarous institutions, of which at least the rudiments are discernible, lead to the same conclusion of a common origin for all the natives of the continent. In the third place, what may be called personal peculiarities, identical in different and widely spread tribes, point likewise to a common descent from a single ethnic branch of the human family. It will be the aim in a subsequent part of the present work to give an account of the manners and customs of these native races, and to outline the institutional forms of which their savage state has shown some traces and beginnings.

From the main line of pre-Australian migration a secondary ethnic development has apparently occurred in the archipelago lying north of Australia. From this origin the Papuan division of mankind has apparently taken its rise. In general, the Melanesian islands are peopled with races derived from this source. New Guinea has drawn its population from this Papuan stock, and has taken their name as the modern designation of the island. Traces of the same race have been followed to the east and south as far as the Fiji islands, where the migratory movement seems to have terminated. In short, throughout Melanesia the Papuan lines have carried peoples of this stock north, south, east, and west, as far even as the coast of Japan, and westward to the Andamans.

Origin and course of the Papuan distribution.



PAPUAN TYPES—MALE AND FEMALE HEADS.—Drawn by E. Mésplés.

Southern Borneo and a great part of Sumatra have felt the like influence among their aborigines, and nearly all of the islands between Australia and the coast of China are infected with the same blood and derivation. The southern limit of the dispersion is reached in Tasmania where the Papuans took one of their most characteristic and

Geographical limitations of the race.

undisturbed developments. The geographical limits of the race are the great ocean region between the forty-second degree of south latitude and the thirty-fifth north. Eastward the Fiji islands, under the meridian of one hundred and eighty from Greenwich, and westward the Andaman islands under ninety-two degrees east, define the lateral distribution of the Papuan race. Its peculiarity is that it is wholly insular. The great country of Australia, though lying in what might be called the heart of this ethnic development, seems for some reason to have shed the Papuans and to have taken a family of native peoples peculiar to itself.

We have thus attempted to trace out the geographical distribution of mankind according to their several races and kindreds. All parts of the globe have now been considered, including the remote islands of the South Pacific. It will readily be allowed that in many places the course of migrations, as indicated in the foregoing discussion, is hypothetical. It may be claimed in this particular that in a scientific age, such as the present, all work by hypothesis and conjecture ought to be eliminated from a discussion which pretends to partake of the nature of the exact sciences. This view of the case is too extreme and severe. The progress of knowledge depends not infrequently upon stepping from shore to shore by means of hypothesis and theory. This method of human investigation in many cases foreruns the observed order of nature and indicates the place and limitations of law. It is only in this sense that we have here ventured to fill up certain gaps in the movements of mankind by theoretical lines. All such work is, in the nature of the case, tentative, and subject to revision and correction, as discovered and discoverable data may hereafter indicate the necessity of such modification.

Legitimate use of hypothesis in ethnic inquiry.

Before dismissing this part of the subject, several topics present themselves for passing consideration. In the first place, the long-standing dispute about the place, the time, and the method of man's appearance on the earth obtrudes itself constantly into the inquiry. It is pressed upon the mind of the ethnographer not only by the ever-recurring suggestions of traditional belief, but also by the very necessities of his theme. Almost in despite of those restraints and cautious methods which he imposes upon himself and upon every branch of the subject, he finds himself disposed to favor the one or the other of the several current theories respecting the original locus of mankind and the nature of the genesis of the race.

Question of time, place, and manner recurs.

The fundamental question is whether the facts of ethnology on the whole tend to strengthen or to weaken the monogenetic theory of the human family. Did the race of man arise from a single source and a single pair, at a single time and under simple conditions? or did the various branches of mankind have polycentric origins and independent lines of development? In this form the question is simply anthropological. Carried into the domain of natural science, however, the problem has become one of creation by evolution or immediate and phenomenal creation; and the inquiry takes the same form which it has respecting all other animals and all plants on the face of the earth, namely, did they originate by evolutionary processes of growth and adjustment from a single germ or a few germs of life, scattered in

Theory of Monogenesis is best sustained by facts.

the soil of possibility, or did the existing forms of life appear phenomenally in time and place and in complete development? On the whole, it may be said that the theory of a monocentric origin for the human race gains under the addition of facts and the reädjustments of right reason; while on the other hand, it may well be allowed that the universality of the evolutionary process as applied to all other forms of life would seem to demand a like process of growth and development for man.

True aspect and form of migratory movements considered.

It is also fitting in this connection to add a paragraph in the way of further explanation of what may be called the *true aspect and form* of those migratory movements which have been delineated in the present book. In several places the reader has already been put on caution against the too exact representation of these human phenomena by means of lines and the other physical terms made necessary by the nature of the discussion. Ethnic lines drawn on a map from place to place as indications of the movements of tribes of men in process of natural dispersion must not be understood as a narrow highway or as a river channel bearing a single definite volume of water from its source to its mouth—from its departure to its *débouchure*. Human progress over the face of the earth has never been in this exact similitude. If any tangible symbol could be adopted to express to the senses and receptive faculties of man the exact nature of tribal diffusion, it would be that of *a film spreading over the face of the earth*. Nevertheless, this filmy and irregular dispersion of mankind does proceed from one place to another. It starts from a definite origin and reëstablishes itself in another locus far removed. A line drawn from one of these places to another subserves an excellent purpose as indicating the *direction* which the movement, considered as a whole, has taken, and also as defining the points of departure and arrival. But in other respects the line is altogether misleading, as being *too mathematical* and *precise* for the fact which it is intended to represent. If a map could be so constructed as to bear broad, thin bands of color, widening and contracting and bending in likeness to the expansion and narrowing and eddying of actual tribal movements, the representation would be more in conformity with the facts. The student of ethnography must, therefore, be on his guard lest the notion or concept which he receives of the migrations of mankind, deduced from the drawing of lines across the map through continents and over seas, be inadequate, and, indeed, erroneous in its nature.

Familiar illustrations of the movements of races.

Many familiar illustrations drawn at random from the movement of peoples within the historical era may be deduced in illustration of the misconceptions into which the inquirer is likely to fall. For instance, the passage from the shores of the Old World, in ships, of the colonists who planted themselves in little rookeries on the eastern seaboard of America might well be represented by lines drawn across the Atlantic from point of departure to point of settlement. But the diffusion of those peoples inland from the Atlantic shores, though it had a direction and a tendency, could hardly be given a linear representation. With the development of the Old Thirteen States, the overflow of their population by adventure came through the passes of the Alleghanies into the Ohio and Mississippi valleys; but such a movement would be very poorly represented by lines.

The peopling of the trans-Mississippi states and territories was in the nature of *a gradual spreading* of the American race toward the Rocky mountains. The colonization of Kansas and Nebraska may in general be traced to an origin in New England. But a single line drawn from Western Massachusetts across New York, Pennsylvania, Ohio, Illinois, and Iowa, and bifurcated at its passage of the Missouri river into Eastern Kansas and Nebraska, would be a very inadequate, not to say an erroneous, representation of the actual facts. Yet the movements which we have here described were projected in the open daylight of history, under the conscious and rational forces of civilization. They were consequently much more exact than those *natural* expeditions and swarmings forth which characterized the barbarous epochs of human society. The progress by which the colonists have peopled the western portions of America by migration from the east is much more susceptible of exact delineation than were those prehistoric movements which were directed by the blind forces of barbarism. An attempt to point out with geometric curves the course taken by the Teutonic hordes who came into Britain in the fifth century, or by the Northmen into Neustria in the ninth, would be not only conjectural but exceedingly inefficient as a pictorial method of symbolizing the things it is intended to express.

Gradual diffusion of the Anglo-Americans westward.

The movements of human society on the surface of the earth are as multifarious as the swarming of bees from the parent colony. It is easy to indicate the general direction of the swarm, to point out its origin and its ultimate destination in the distant forest; but its exact course and the manner of its going are phenomena exceedingly difficult of definition and description. Human migrations are even more intangible and multifarious in their manifestations than are the blinder circlings about and the final settlings of animals and birds, and the reader must be on his guard against the exact and mathematical delineation of such movements on maps and globes. They are, at best, the vague indications of the places *from* which and *to* which and the space *over* which the tribes of men have drifted and turned and whirled on their way to a final occupancy of a different and distant part of the earth's surface.

Exactitude not to be expected in ethnic movements.

Still another important consideration arises with respect to the classification and tribal dispersion of mankind. This relates to *the precise separation* of tribe from tribe and race from race which the ethnographers have employed in their schemes of division. These plans of distribution and of race partition are drawn up as if they were mathematical formulæ. It is assumed that the Ruddy races are clearly defined from the Brown, and the Brown races from the Black; that is, that the lines of demarkation between these major divisions of mankind are clearly and definitely drawn. Such a supposition is as wide from the fact as is the use of a line to represent the prehistoric movements of a tribe. It is true that there are Ruddy races, that there are other races which are Black, and others Brown. But the lines of division which are supposed to separate the one from the other, that is, the ethnic distinctions by which the one is separated from the other, would be difficult to discover.

Separation of tribes and races not complete.

It is here, as in all natural analysis, that nature hangs together. The races of men grade off, the one into the other, by imperceptible degrees. This is true

of their physical characteristics, of their mental habitudes, of their morality, and of their institutional forms of life. It would perhaps be impossible to find the exact points of division between the

Off-grading of the human species; no lines in nature.

TYPE OF RUDDY RACE APPROXIMATED TO BROWN —A NATIVE OF MADRAS.
Drawn by Emile Bayard.

Black peoples of the world and those who are classified as Brown. Nor could the Ruddy peoples be separated from either by a precise line of demarkation. Nature abhors *a line!* The physical world does not present a single instance of what may properly be called a line. Every phenomenon is shaded off on all sides into the other facts with which it is associated. It is true that the distinction between night and day is sufficiently striking; but all the scientific tests in the world could never define the limits of that dawn which separates the one from the other. The cloud is discriminated from the sky, and yet by what kind of test could the edge of a cloud be defined from its atmospheric envelope? It is not possible to produce even on the edge of the finest cutlery an actual line. Everywhere there is a blending of the phenomena that lie on the two sides of the demarkation. In the world of life this absence of exact outlines by definition is equally noticeable. The differences between races of men are among the most striking and interesting facts with which historical inquiry has to do; but these conditions are graded down until at the selvage they blend with one another into a common character.

This, however, is not to assert that there is no difference between one race of men and another. It is only to deny the division of the one from the other by those exact lines of discrimination which ethnographers are wont to employ. Those thinkers who have made the widest application of the hypothesis of evolution to the various forms of life on the globe have become satisfied that all varieties of living forms merge into each other, and that the method of classifying by genera and species is in reality fictitious—a convenience of science perhaps, but having no corresponding fact

Species a misnomer in the economy of nature.

in nature. It is held that whereas there are almost infinite *varieties* among living creatures, there are no *species* in the sense in which that term has been hitherto understood by natural philosophers. In many places in the world of life great gaps and chasms are discovered which it is necessary to bridge over by supposing intermediate living forms which have disappeared. But it is believed that if all the phenomenal exhibitions of life which have been seen on the earth could be restored, the artificial methods of classification now employed would disappear; in other words, that all life would become one, the various formal manifestations of the same being shaded off by such fine degrees as not to warrant the fixing of the great classes and smaller divisions which furnish the nomenclature of biology.

If this view of nature be accepted as applied to the human race, we should be led to regard the chasms between the different divisions of mankind as the result of the perishing and dropping out of certain intermediate types that, on the whole, were less able to perpetuate themselves than were those varieties of men who were differentiated under more favorable conditions on either side of the departure. We should thus be led to regard a given "race," so called, as a certain form of humanity which nature had proved and ratified under the laws of environment and survival. A different family would present simply another aspect of the one common fact adjusted to new conditions and developed on new lines of activity. Intermediate between these two separate forms of human evolution we should find both branches grading toward each other and approximating to a common type. The type itself would perhaps be absent, but the shades on either side of the line of demarkation would be so slightly different as to be hardly distinguishable the one from the other.

Races of men must be regarded as varieties of a common life.

Such conditions are discovered along the edges, or selvages, of race development. The Danube in ancient times constituted a kind of geographical barrier between the Teutonic and the Græco-Italic races. The Goth, considered as a Goth, was sufficiently distinct from the Greek considered as a Greek, or the Roman as a Roman. But the two races at their margins approximated a common ethnic form, and this independently of the admixture of blood. All of these considerations are adduced and urged upon the attention of the inquirer to the end that his concept of race divisions may be somewhat more in accordance with the facts, than would likely happen if he were trained to consider the different streams of mankind distinctly separated by the exact lines of ethnography.

Peoples approximate along their ethnic margins.

CHAPTER XXXI.—MIXED RACES OF MANKIND.

WE are thus led to the consideration of another fact of no little importance in the general apprehension of the movements and dispersion and development of mankind. This is the existence and character of *intermediate or mixed races*. It has always happened that wherever two families of men have touched each other geographically, they have also touched by the more intimate admixture of blood. In the early ages of history, when race antipathy was stronger than it is under the light of civilization, the intermingling of different branches of the race was less frequent and conspicuous than in modern times. But intermarriages were common from the remotest epochs, and are mentioned as common circumstances in the most primitive traditions of the world.

Existence of mixed or intermediate races.

As a result of the cross-relationships thus established between families of different blood an offspring, possessing something of the traits of both ancestors, would arise, intermediate between the two; and when the departure between the two stocks thus blended was strongly marked in color and other ethnic qualities, the result of the union would present a type sufficiently distinct to be classified by itself. An intermediate group, or branch, of people would thus be established who, preferring associations with their own kind, would become a tribe, and finally a nation. Such is the somewhat theoretical view of the genesis of a mixed race of people.

Race offspring takes character from both ancestors.

Strangely enough, however, the facts do not seem to warrant the conclusion. This is to say that the tribal and race development of the intermediate stock has never seemed to answer to the expectation of the premises. That is, there is an apparent law in the natural world which forbids the propagation and expansion of these intermediate varieties of mankind. The law in question is common to man, to the lower animals, and to plants. The hybrid does not procreate its kind. It is incapable of doing so. This is to say that if the two animals which have been united in the production of a third be sufficiently differentiated from each other as to belong to what the naturalist calls diverse "species," then the offspring can not procreate its kind, and the movement in the direction of a new variety of animals ceases with the first stage. If, however, the two animals are so near together in structure and characteristics as to fall within the limits of what is called a "species," then, indeed, the offspring of their union can procreate along the new line of life. But it has been universally observed that such propagation is extremely feeble, and that it tends to weakness and early extinction. In cases where this does not actually happen, the offspring of the original union, after a few generations, reverts to the type of the one or the other of the ancestors from which it was descended.

But intermediate forms do not perpetuate themselves.

This reversion to the character of an ancestral stock appears to be the case with the union of the different branches

of mankind. That is, considered according to the biological classifications until recently acknowledged as the best

APPROXIMATION OF BLACK AND BROWN RACES—THE MOOR FAGHE.
Drawn by E. Ronjat.

expressions of the different orders of nature, all men fall within a single *species*, having its varieties which may unite despite of their strong distinctions, and produce a progeny having the qualities of both parentages. It has been maintained by many naturalists, and until recently has been generally believed, that these hybrid forms of human life have in them the elements of perpetuity, that the new variety of mankind thus established is fecund in its kind, and as well qualified to maintain its independent characteristics as is either of the types from which it has been derived.

All varieties of men fall within a single "species."

A closer study of the situation, however, has established the opposite view. It is now known, and wellnigh universally recognized by biologists, that the intermediate varieties, or so-called mixed races of men, are, considered as distinct types, exceedingly short lived, unable as a rule to continue their existence or to maintain the distinct features which they present in the first generations after the original admixture. Such intermediate peoples, therefore, constitute, not, as was hitherto supposed, distinct races in the ethnography of mankind, but a kind of floating population interfused among the nations of the world, mixing and

Short-lived character of all mixed varieties.

APPROXIMATION OF THE RUDDY AND BROWN RACES—DON MARIANO TERAN, PRIEST OF COPORAQUE.
Drawn by Riou, from a photograph.

mingling dimly with the other human elements, but really effecting no changes in the general constitution of any type.

In all ages this impermanent compound of humanity has shown itself along the margins of race contact, but has never exerted other than a modifying influence on the separate peoples from whom the mixed type has been deduced. We have already seen that the valleys of India were populated before the immigrant Aryans took possession of the country. In another chapter the presence of this aboriginal population has been accounted for by the hypothesis of a Dravidian migratory movement across the peninsula before the deflection of that race into the great archipelagoes of the East. The Aryan tribes were not severe with the aborigines, but absorbed them by blood union and amalgamation. The result was, not the establishment and perpetuity of an intermediate or mixed race, but merely a modification in the Indo-Aryan character. It is believed that the immigrant and superior race took a considerable percentage of the Brown color of the Dravidians, something of their tropical suppleness of body, and a certain mental quiescence favorable to the genesis and propagation of the dreamy philosophies and negative religions of India. These results have continued to the present time, and are quickly discernible by the ethnographer in the swarthy complexion, litheness, and subjective moods of the peoples of Hindustan. But the Hindus are not to be regarded in the light of a mixed race. They are essentially Aryan, not only in their genesis and evolution, but in their present character as a race. The tint of the Old Dravidians is in their countenance, and their blood is tinged with the influences of aboriginal descent; but the ethnic type is the same that it was beyond the Hindu-Kush and in the old Aryan *nidus* in Bactria.

Results of intermixture in the case of the Indo-Aryans.

The same phenomenon has occurred and recurred in hundreds of instances in the history of mankind. In fact, it is exceedingly exceptional to find a race of men who have not been more or less infected in blood and development by alien influences. But each race has continued its course of evolution under the dominion of the original ethnic impulse; and while it has accepted modifications from foreign peoples, it has persisted in maintaining its own type. The attention of the reader has already been called to the fact that the Assyrians were a people who had been thus modified by two or three contacts with other races. The Hamites on the south had somewhat infected the ethnic character of the people in Upper Mesopotamia. Later on, the Aryan Medes penetrated the country on the east and gave another modification to the people. So great were the changes thus effected in the Assyrian race character that ethnographers have been confused in their classification. Even the language was so much infected as to mislead the inquirer in regard to the linguistic stock from which it was deduced. But all of these foreign influences were no more than modifications in the real Semitic constitution of the Assyrians. The foreign admixture deflected somewhat the course and character of the people of the Upper Tigris, but did not subvert their fundamental constitution or substitute one ethnic descent for another.

Examples of like ethnic phenomena elsewhere.

The peoples of Western Asia Minor, especially on the south, were regarded as composite. This fact has been pointed out in a former chapter. But the persistency of the strongest stock, whatever that was in a given instance, preserved the original type, however modified and diverted from its earlier

Further examples of composite ethnic character.

standards. All the western nations of primitive Europe might be cited as examples of the absorption, to a greater or less degree, of preceding populations that were overcome by conquest and taken up by the process of amalgamation. The Hamitic Basques and Iberians of Spain were in this manner absorbed by the Aryan Spaniards of a later age, and the latter received from the former a darker tinge of color, and perhaps other physical and mental characteristics which they carry to the present day.

The Israelites modified by the environment of races.

The modern world presents still more strikingly the modifications resultant from the intermixture of distinct types of people. Perhaps no stock in the world can better exhibit the persistency of the original type under infinite modifications of environment and foreign impact than the Israelites, who are at present interfused among the Western nations. The "Abrahamic face" is seen in all the marts of the world. The original character is strong upon him. He has intermingled with all the races. The Spanish Jew is very different in constitution and ethnic character from the German or Polish Jew; but each and all have preserved an original type under diverse and divergent aspects.

Modern ethnography has taken note of an almost endless variety of mixed races which present the beginnings, but never the results, of new ethnic developments. The distribution of the Black and Brown races into regions of the earth now occupied by the Ruddy families of men has given occasion for the production of these multiform cross-bloods whose interest as races lies not in their perpetuity, but merely in their present aspect. Wherever the Ruddy and the Black race have come into contact, that type known as Mulattoes has appeared, and until recently it might have been thought that the Mulatto was destined to permanence as an intermediate type of mankind. This, however, is the very thing which, under the law of nature, can not, or at least does not, occur. The Mulatto is fecund. It has been noticed by statisticians that the first generation of Mulatto children, that is, Cascos, or those who have Mulattoes for both parents, are unusually numerous; but it is also observed that the tendency to reversion immediately appears, some being blacker, like the ancestral mother, and others whiter, like the first father of the admixture.

Wide diffusion of mixed types; the Mulattoes.

The latter type of Mulattoes, that is, those who gravitate toward the white parentage, are almost invariably weak and spiritless. If they procreate at all, the offspring dies, and the reversion toward the white parentage soon ceases for want of material. The blackward tendency goes on for several generations, when the distinction between the Mulatto progeny and the children of Blacks is no longer noticeable. The type has reverted on the side of the original mother. The same phenomenon recurs with the Mestizo, or the half-breed of the Mexican and the Spanish-American states. As a rule, the father, in this case, is a white Spaniard and the mother an Indian woman. Here, again, in the first generation a distinction appears among the children. The Mestizos fluctuate from the father's to the mother's side, and, though somewhat more persistent than the Mulattoes, they either revert or perish.

Instability of the Mulatto stock.

That indefinable type, called Creole in those countries where the word is

used to designate half-breeds, shows the same or analogous tendencies. The Zambo, or cross between the Negro and the Indian, is after a few generations undiscoverable as a separate type. That is, the Zambo can only be perpetuated by the repetition of the original cross.

Crosses of American aborigines with Negroes.

or forces which occasion the departure of one type of people from another, and the development of each into diverse forms of activity, we should, perhaps, find the answer to our inquiry in *the nature of procreation and birth*. There is a human instinct which, in virtue of its

Ethnic instincts traceable to procreation and birth.

MIXED TYPES—MEXICAN WOMEN.—Drawn by Riou.

So, likewise, of the Cholo of South America, the Pardo and the Mamaluco of Brazil, the Chino of Mexico and Spanish America, the Cafuso, or Negro-Indian cross, of Brazil, and in general of all varieties and shades of the so-called mixed races of mankind.

If we are disposed to look into what may be called the origin of races, that is, the very primary circumstances

own nature, hovers around the fact of maternity. Still deeper down than this somewhat generalized sentiment that covers the mother, there is an instinct of the mother herself for her offspring. This is sufficiently strong even in animals to stimulate intelligence and forethought. The mother does not abandon her child. She protects it, nurses it. Otherwise, there were no perpetuity.

This maternal impulse is the bottom fact in the ethnic dispersion of mankind. The mother is bound to her child by the law of her being. Therefore she keeps it, first on her breast, afterwards at her side. She is the mother, not of one, but of many. She nurtures and gathers all of them about her, and puts herself between them and danger. This phenomenon is perfectly natural, and, like other elementary facts, is incapable of explanation. To the mother and her group the father is drawn. They constitute a complex fact, and he a simple fact. Even in savagery he is tied to this group, with one of whom he has the most intimate association, and of the rest of whom he recognizes himself as the creator.

All race dispositions arise from the family.

The ties which bind the father to the mother and to his offspring are not so permanent and absolute as those between the mother and her children. But they are, nevertheless, sufficient to hold him, with tolerable singularity, to her and to them, and, indeed, to constitute him their head and defender. Doubtless the sentiment of fatherhood arises at a very early period in the breast of the savage, and, though it is not constant and dominating in the barbarian, it nevertheless is sufficiently pronounced to complete the elementary conditions of the family. The family, then, begun on these simple and natural, we might say inevitable, conditions, is the beginning of race divergence.

Place of the father in the primary organization.

Out of the family springs the gens. The brothers of a given family, mayhap the sisters, become the heads of other families, bearing an intimate relationship the one to the other. They have a common blood. They dwell together or in proximity. Their interests are, in large measure, mutual. They help each other, prosper together, suffer together, and struggle in common causes. They call each other by the common ancestral name, and are thus all grouped as one, constituting that fact in the evolution of man called the gens, the clans, the sept, the totem, or some such name significant of a single blood origin and development. The gens, then, is the second stage of race evolution.

In what manner the gens is evolved from families.

Out of the gens arises the tribe. That strange fact which we call by the general name of *nature* does not freely permit the intermarriage and blood union of intimate kinspeople. There is a revulsion against it as a method of procreating and extending the race. The natural affections of brotherhood and sisterhood, even in the most savage state, are totally different from those sexual affections upon which the multiplication of the race depends. It is thus found convenient and desirable, in the very earliest stages of society, that the members of a given gens do not intermarry with one another. It is found to be more fitting that the man of one gens take the woman of another to his wife, and vice versa. For convenience, we call the members of a given gens *gentiles*, and the rule of even the most profound barbarism is that gentiles shall not intermarry. With the cross unions which take place under these natural laws, relations are at once established between two or more gentes. These cross relations bring the several gentes together in a common cause. The selvages of all are knit together by the marriage unions among them, and the offsprings of such unions are allied to all in common. This union of several gentes constitutes the tribal or third stage in race evolution.

The tribe in like manner springs from gentes.

It must be borne in mind that the threefold process which we have here described occurs in the plastic stage of human development. It may be assumed that the primitive gentile was in a state of youth as it respects the family childhood that had been and the race manhood that was to be. It is well known that throughout all nature plants and animals pass through *a state of susceptibility* in which and out of which they may be deflected into almost any form of growth. There is a time in the history of a tree when, as a mere withe, it can be tied into a knot without injury to the organism. There is a time when the husk of corn may be opened and a row of the grains cut out, and the wound will close and the completed ear give no hint of the process by which the number of rows thereon has been reduced from even to odd. Aye, more, in the early stages of life all animal forms are virtually identical. But at a certain period they begin, in obedience to their own laws, to differentiate into the several types which they are ultimately to bear.

The gentile life a state of susceptibility.

The gentile age of man appears to be his "age of susceptibility," as it respects the form and character of the race toward which he tends. Something of this susceptibility is carried forward into the tribe, which is the next higher form of human structure. It is likely that after the tribe has been well constituted, the features of the race are not only discoverable in the tribal lineaments, but are in a measure *fixed* so as to be subjected to little additional modification. Thus, if we trace the barbarian unit of the primitive world toward the coming race of which his descendant is to be the epitome and brief abstract, we shall find that his actual differentiation into race form takes place while he is passing through the gentile and tribal stages of development.

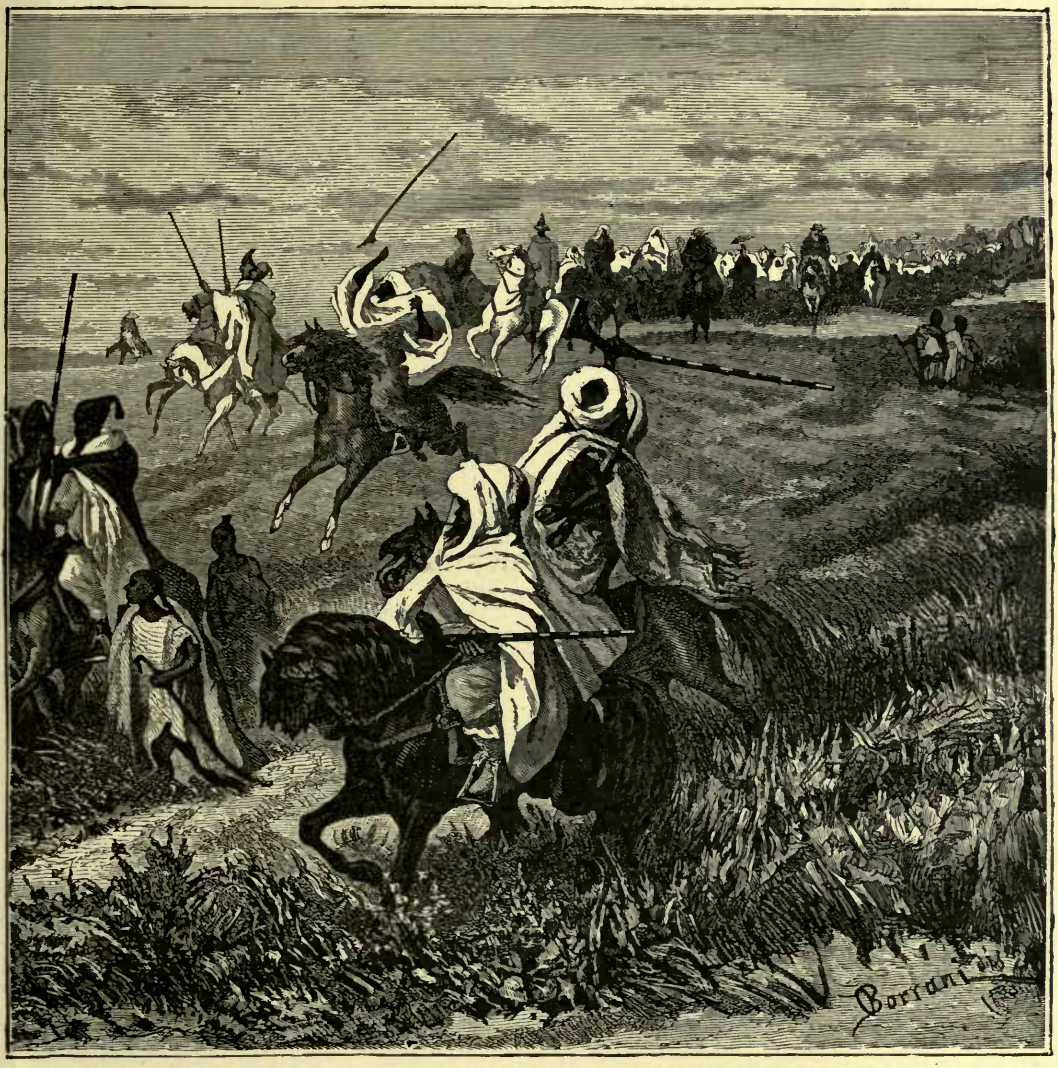
In the tribal life ethnic features are established.

It happens—has happened—in a vast number of instances that the development of mankind has been arrested in the gentile stage. This is to say that the *organic tendency* ceases at this low point in the scale, and instead of reaching a tribe by the evolution of the gens, we come to that other remarkable fact in the prehistoric world called the horde. A horde is not a tribe. We have in the vegetable kingdom a phenomenon called blasting. The grain that is to be, instead of coming to development and maturity, suddenly passes, as in the ergot of rye, into a blasted and inorganic condition. The horde is a blasted tribe. It happened in the ancient world that the growing gens sometimes expanded sparsely into a vast and cheerless region, unfavorable for aggregation and, perhaps, already thinly populated by some aboriginal form of humanity. The dispersing members of the gens that might have become a tribe under more favorable circumstances, inviting them to unite with some other gens into a more complex form of organization, merely diffuse and scatter among the barbarians already existing, intermingle with them, become a common mass, without discoverable features or form, and presently, after multiplication without development, roll away, under the influence of some blind force, into the form of a *horde*. This phenomenon recurs and re-recurs beyond the horizon of history, and even on this side of the dawn. To the present day there are hordes drifting over the waste regions of the earth, without form and void. They are the miscarried aspects of tribal development, the ergot of races that have suffered abortion.

The horde arises from arrestment of race development.

The surviving tribe, however, situated under more favorable conditions and urged by a more rational instinct, fixes itself in the soil, and presently, by its growth, expansion, and maturity, presents us with that aspect of humanity to the divisions thereof, and sometimes even to minor stocks. But, as we have said, the context generally shows in which sense the word has been employed. Race, then, may be understood as an expression for a given type of mankind sufficiently differentiated from

The race is the result of tribal evolution.



THE HORDE.—Entrance of the Moors into Alcazar.

which we call a race. The word is very inexact. It has a wider and a narrower sense. Its merit is that it generally conveys to the mind, in its relations with a given context, the true sense which it is intended to give. The term race is sometimes applied to all mankind, sometimes all other types to present and maintain certain characteristics easily distinguished from those of other branches of the human family.

Such a differentiated form of mankind is the product of tribal evolution into permanency and persistency of structure.

The genesis begins with the instinctive preference and passion of the mother for her own offspring, and the association and binding of the father to the mother and child as the head of the family. The evolution passes easily into the gentile form, which is the first stage above the family development. The gens unites with another gens, or with other gentes, to produce a tribe. This is the migratory, and also the differential, period of the human career. When the tribe has become fixed in a favorable locality it expands, under auspicious conditions, into the permanent form of a race, and the evolution is complete.

The successive stages of development summarized.

The gradual and toilsome spreading of mankind over the surface of the globe has been a process both striking and wonderful. In the course of ages the planet came into the habitable condition —into the epoch of life. Life appeared. The lower forms were succeeded by the higher. Man came as the master race of animals. He came with reason, at least potentially, and with possibilities of improvement, of adjustment and readjustment to his environment, of change and growth and high achievement. With the development of his tribes migration became a necessity, not, indeed, a definite movement from one locality to another far distant, but a spreading first into adjacent regions, and afterwards to lands afar.

Slow and toilsome progress of the human race.

With this outbranching from old ethnic centers there came, in the plastic stage of mankind, the differentiation of tribe from tribe, of race from race. Possibly a diversity of individual instinct was the small source from which the differential tendency arose. Some cause there certainly was for the branching forth into different forms of the common stock of humanity. Long, tedious, and variable have been the processes of movement and evolution until, at last, all parts of the habitable globe have come under the dominion, or at least the occupancy, of the race.

It has been the aim in the current book to give merely a cursory sketch of the principal movements by which this distribution of mankind into all parts of the earth has been effected. In tracing out these migratory waves we have only incidentally touched upon the peculiarities and characteristics which were meanwhile manifesting themselves among the various races and nations. While the distribution has been in process of accomplishment, the distinct features by which race is distinguished from race have been evolved. The conspicuous differences which discriminate one people from another have appeared, until the modern inquirer is more surprised at *the variable aspect* of mankind than he is with those movements which have preceded the present conditions of the race.

Synoptical view of the dispersion of mankind.

CHAPTER XXXII.—GENERAL VIEW OF ETHNIC CHARACTERISTICS.

EFORE passing to another general division of the subject, we pause to look somewhat more attentively at the general ethnic peculiarities by which the different races of mankind are discriminated the one from the other. The inquiry will include not only distinctions, but also analogies and identities among the different branches of the human race. It is intended to note the traits and qualities of life and manners among at least the principal divisions of mankind, to the end that the race characters of all may be clearly discerned. The study before us will include what may be called the personal characteristics of the various races, together with their means of subsistence, their habits and manners, their primitive institutional forms, their intellectual appetencies, their arts—where the same exist—and their influence as a modifying force in the physical world, or, in general, the traits of mankind and their relations with the laws and conditions of environment.

Personal characteristics of races to be considered.

It is purposed in the present chapter to glance briefly at these ethnic peculiarities from *a general point of view*. There are a few leading features by which the races of men may be strongly discriminated, and it is perhaps along these primary lines that their differentiation has been chiefly accomplished. After noting these first principles of divergence, we may, in the following chapters of the present book, descend into the particulars of tribal life, developing, according to the present resources of knowledge, the whole aspect of the race as the same is displayed in different parts of the world.

Races of men distinguished by certain leading features.

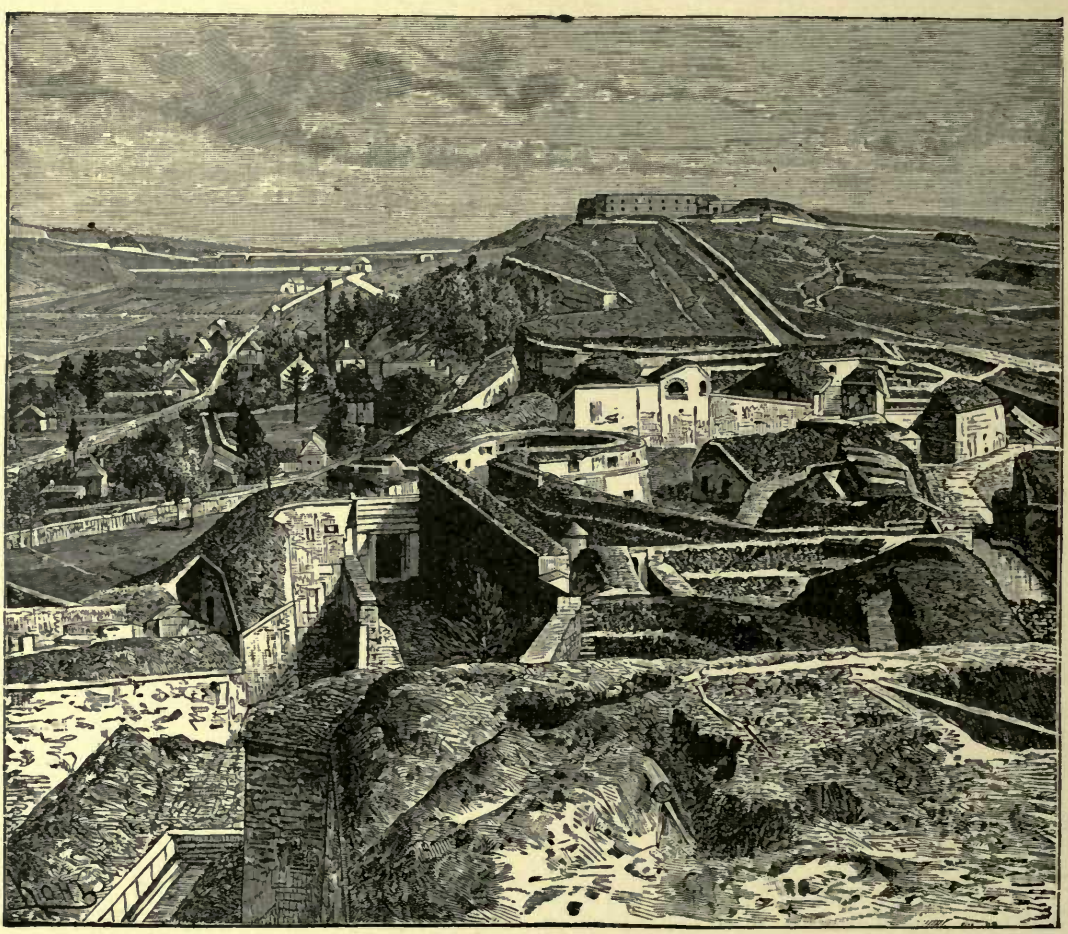
In the first place, it may prove of interest to note, as we look down upon the whole scene of human development, from the beginnings of race evolution unto the present day, the extent to which the different kindreds of mankind have been able *to modify the conditions of the physical world*. The observer will be struck at the beginning with the fact that some peoples have effected a very considerable change in the surface of the earth, while others have in no wise modified the primitive aspect of nature. There are parts of the earth in which the change effected by human agency has been very considerable, insomuch that if the earth were viewed, planet-like, as we view the moon, the modifications effected by human agency would be easily discoverable. It has happened that all such changes have taken place in the north temperate zone, or possibly to a small extent within the tropics. Western Asia and Europe throughout have been, until the present century, the scene of the largest modifications produced by the agency of man. At the present time the most rapid change in the general aspect of the world is that which is taking place in the central zone of North America, under the impact of the English-speaking race.

Ability of mankind to modify the physical environment.

If we look at these changes from an ethnic point of view, we shall soon discover that they have been effected most

largely by the agency of the Ruddy, or so-called White, races of mankind. In the countries of the Brown races it is not in evidence that the surface of the earth has been transformed to any considerable degree, except in Eastern Asia, where the Chinese Mongolians, through long occupancy of a given country, have wrought a considerable change in its aspect. The original physical condition of China is a matter of conjecture, but it is not unlikely that forests were prevalent, and that much greater humidity prevailed in primitive ages than within the historical era. As a matter of course, both of these former conditions have been changed by the massing of a great population and its necessary subsistence from the soil. Native woodlands could not possibly coëxist with so dense a population. Forests have entirely disappeared, and the rivers have no doubt shrunk considerably in their volume.

The Ruddy races have effected greatest modifications.



MODIFICATION OF THE NATURAL WORLD BY MAN.—View of the Fortifications of Belfort.—Drawn by Taylor, from a photograph.

In most parts of the earth, however, the Brown races have little concerned themselves with the physical conditions around them. More particularly, they have made few efforts to transform the primeval state of the countries into which they have penetrated. Asia north of the Altais remains virtually as it was before the race of man had taken possession—if

Brown races do not concern themselves with physical conditions.

possession that may be called which consists in mere occupancy. Doubtless considerable cosmic modification has occurred since the coming of mankind, and those limitless steppes and cheerless mountain slopes have shared in common with the rest of the earth the slow processes of climatic change; but the actual agency of man in the Turanian countries has been but slight in so far as the conditions of physical nature are concerned.

One of the first instances of the mastery of the earth's surface was in the Mesopotamian region, where the strong tide of the Noachite family flowed to the west. In Chaldæa, about the head of the Persian gulf, the whole surface of the low-lying plain has been raised to an elevation of many feet above its prehistoric position. It has not been determined by geologists and ethnographers by what process the surface of thickly inhabited countries is elevated to higher levels; but that such is the actual fact the old Chaldæan burying grounds and the level of the whole region around Rome conclusively show. It is well known that the two great rivers, Euphrates and Tigris, were thrown together either by the elevation of the country along their banks or by the cutting of canals through the alluvium. Another marked variation in the Chaldæan landscape was the extension of the verdant region on the side next the Arabian desert. In this direction the waters of the Euphrates were carried off by the agency of man to a distance of a score of miles, by which agency the fertile extent of Lower Mesopotamia was perhaps doubled in area. In the northern region the native woods from the foot of the Armenian mountains down into Central Mesopotamia were removed, and the desert character of the country, such as it was in the days of Herodotus and afterwards in the times of Xenophon, was the result.

Modifications effected by man in Mesopotamia.

To what extent nature sympathized with these changes on the surface of the earth we may not well determine; but there was doubtless a considerable climatic modification resultant from human agency. Through all of Asia Minor to the Ægean the same kind of modifications were effected. On the whole, the country between the Black sea and the Eastern Mediterranean was greatly deteriorated by the influence of the early peoples who planted themselves in this fertile region.

Nature changes somewhat under the influence of man.

It is here that we may consider for a moment the great injury done to the face of the world by the butchery of forests. It is true that the relations of man with the earth require the conversion of wild woods into fields and gardens, but the wise energies of the race should be directed to the redistribution of the tree-growths on the face of the earth rather than to their mere destruction. Nothing is more certain than the desert tendency which immediately appears in every country which is recklessly denuded of its trees. No country has suffered in this respect more than has Asia Minor. Its extreme fertility in ancient times can not be doubted. For a long time after the institution of civilized states in this peninsular portion of Asia the country was proverbial for its great yield of grains and fruits. Man has virtually exhausted the whole region by his careless administration. He has consumed the current resources of the country and provided nothing in their place. The result has been the creation of great deserts on this area once cov-

Injury done to the world by destruction of forests.

ered with grain-bearing fields and orchards and vineyards.

Asia Minor more modified than Eastern or Northern Europe.

This was the work of the Aryan peoples who came into Lesser Asia and there developed the early states which flourished until they were crushed between Persia and Europe. But if we follow the northwestern line of Aryan migration into Northern Europe, we shall pursue our inquiry far before we come upon another country so greatly modified by the agency of man. The southern peninsulas of Europe were early transformed from their native state into habitable territories, but the vaster regions north of the Alps and the Carpathians remained in the wild.

Variable power of races as modifying agents.

The migratory tribes generally effected no change in the regions through which they passed. Their vocations of hunters and mast-eaters did not interfere with the natural course of the physical world. At the beginnings of authentic history Germany and Gaul and Britain were in the primeval condition.

UNMODIFIED ENVIRONMENT OF MAN.—View of Sonmarg.—Drawn by G. Vuillier, from a photograph.

In general, the Celtic race accomplished but a slight transformation in the physical landscape. The Græco-Italic peoples wrought successfully in establishing themselves locally upon the soil and in changing the face of nature. Indeed, this is what is implied in civilization.

Within certain limits, the transformation of the surface of the earth is coïn-

cident and coëxtensive with the march of the general fact which we call the civilized condition of man. This principle, however, has its limitations. It is only within certain bounds that man can effect any change in his environment. It is probably true that in such a country as France, or Belgium, or Great Britain, the limit of man's agency as a cosmic force has been reached. This is to say that nature will hardly feel any additional modification from the continuance of the established status in these countries. Of course, if civilization should decline, there would be a reversion to the primitive condition, as has actually occurred in other quarters of the globe.

Modification of the earth correlative with civilization.

It is, then, the civilizing Ruddy races which have effected the largest modification in the surface of the earth, and by this means have given a certain direction to the ebb and flow of nature. The changes effected primarily in the southern parts of Europe, and, in later times, throughout the whole continent, have been more conspicuous than those presented in other portions of the ancient world. Along the northern shores of Africa, except in the extreme northeast, only slight modifications were made by the races occupying these countries. It should be noted that the earth is much more refractory in some parts, much less susceptible of receiving and expressing the agency of man, than in other parts.

Europe more than Africa changed by human agency.

There are three general features on the surface of the globe that strongly resist the influence of its inhabitants. These are the mountains, the desert, and the sea. Perhaps a slight exception ought to be made in the case of the desert; but the mountains and the sea are absolute. It is possible, indeed, that all the deserts of the world may finally be reclaimed by the agency of man, but the mountains will hardly ever submit to his dominion. As to the ocean, its exemption from human authority has been happily discovered by the poets. Here the human race loses completely its power and ascendency.

Man successfully resisted by three forms of nature.

> "Man marks the *earth* with ruin—his control
> Stops with the shore; upon the watery plain
> The wrecks are all thy deed, nor doth remain
> A shadow of man's ravage, save his own,
> When, for a moment, like a drop of rain,
> He sinks into thy depths with bubbling groan,
> Without a grave, unknell'd, uncoffin'd, and unknown."

The narrow countries of Northern Africa were held between the mountain ranges and the Mediterranean. These two facts determined the climate and the aspect of nature. The Hamitic peoples who built the primitive states on these shores effected but a slight change in the physical environment. The Teutonic races in the north of Europe have accomplished a great work in the transformation of nature. This region was exceedingly obdurate as it stood in the primeval ages. But the race which was precipitated along the Baltic was as persistent as the physical world was forbidding. In one part the primeval forest, dark and ominous, and the great sluggish rivers, rolling down their beds of ooze, were the enemies of progress and development. In another part it was the ocean, surging back and forth over the lowlands, alternately covering and uncovering the vast and coveted regions which were only exhibited for a few hours at a time. The Teuton made a league against the woods and the sea. The one he destroyed, and the other he

Great modifications effected by the Teutonic races.

forced back and compelled to stand aloof. If Northern Europe could be viewed with a telescope from the interplanetary spaces, a great change would be noticed in this region of our world-

Semitic and Hamitic tribes we shall find but little modification in the track which they have pursued. This is partly attributable to the nature of the countries into which they threw themselves

INABILITY OF BLACKS TO MODIFY ENVIRONMENT.—AFRICAN TOWN ON RIVER.—Drawn by Riou.

disk from the dark and dolorous aspect which it presented in the prehistoric ages.

We thus note that the conspicuous changes which have been effected on the surface of the earth by the agency of man have been measurably limited to the great belt through which the Aryan races flowed to the west. If we take up the

The Aryan belt presents the most remarkable transformation.

in their primitive migrations. The circuit of Arabia furnishes little opportunity for the agency of man as it respects the landscape. At the present time it may readily be observed how little, on the whole, the Arabs, from their manner of life, and particularly from the nature of the countries which they hold, have been able to transform the physical condition of the earth.

But apart from the fact that nature in a treeless and riverless region does not invite the transforming power of man to play upon her features, there has been much in the character and instincts of the Hamitic and Semitic peoples averse to that kind of exertion which modifies the surface of the earth. It is true that the Hamites and Semites, especially during the ancient activities of these races, were great builders, and in some instances large producers from the soil. But the mere fact of building does not bring about the transformation of the landscape. In the lapse of time the structures which men rear go down to dust, and things are as they were before, particularly in a country such as Egypt, rainless, cloudless, snowless, treeless. However greatly the building energies of the early race might display themselves, the country itself would be but little modified. It is doubtless true that the valley of the Nile has suffered as little change in its physical condition, under the dominion of the many races which have succeeded each other there, as has any other part of the globe.

Hamitic and Semitic genius unfavorable to physical change.

In general, the countries into which the Hamites and Semites were dispersed were less subject to the vicissitude of climate and more uniform in aspect than the variable and changeful lands to which the Japhetic nations were assigned by their destiny. It will be conceded that in Syria, notably in the Mediterranean states of Palestine and Phœnicia, the Semites accomplished a considerable change in the physical condition of the earth. If we may trust the ancient descriptions which tradition has handed down of the aspect of these lands. it will certainly appear that great modification has been produced by the agency of the peoples dwelling therein.

Countries of Hamites and Semites not susceptible to modification.

If we turn to the Black races of mankind, it will be perfectly reasonable to assert that they have effected, in the countries to which they were distributed, no perceptible changes in the conditions of their environment. The Negro races inhabiting the great central belt of Africa have never shown a disposition to struggle with the forces of the natural world and to subordinate them to the purposes of life. The same is true of the Hottentots. Along the great African rivers the forests stand as they were from the beginning. The towns are built in the forests by the river banks and nature is unchanged. Though the country is peopled and occupied, it is in no sense *possessed* to the extent of mastery and dominion. The same is true in Australia and Melanesia. We speak, of course, of the influence of the native races in these countries. It is a mere truism to assert that barbarians so low in the scale as the Australian and Papuan races neither would nor could modify the surface of the earth by their industries and enterprises. The great difference, indeed, between the barbarian and the civilized states is that in the one the man is the master and in the other the slave of the natural world.

On the whole, we see that the great modifying influence of man on his physical environment has been exerted most largely by the Ruddy races, in their progress to the West. The Brown races in Southern Asia have effected certain changes of like kind in the aspect and conditions of the outer world; but these results have been rather incidental to the massing of vast populations within small areas of territory than from any direct and energetic assault of man on the nat-

Modifying influence of races graded from Ruddy to Black.

ural world. In other regions, the Brown races have in no wise modified the nature of the earth or directed the forces and conditions of their environment. The nomadic Turanians and the Polynesian islanders have submitted themselves to the laws of the material world, and turned their whole activities to other fields of exertion. The Black races, as we have seen, have in a still less degree influenced the physical surroundings where they have held their career. They have simply yielded to the blind elements of the natural world, and have resisted the swirl of the forces to which they were exposed only so far as to cling to the surface of the earth and maintain thereon a precarious existence.

If we seek for the reasons of this diversity in the relations of the different races with the planet on which they hold their career, we shall find, first of all, that the severer aspects of nature in those countries where the Aryan races have been dispersed have invited and provoked the energies of man to the conflict. This is to say that life—mere life—has a harder contest under the conditions which have been imposed on the Ruddy races than in other parts of the world. We have seen that the Black races have all been tropical in their natural development. Under the influence of the blazing sun the earth brings forth in the tropics, and the eater eats. He has no need to subsist upon the heavy carbonaceous and nitrogenous foods which are a *sine qua non* amid the rigors of the north. There is much of the same condition in the Orient and in the islands of the Pacific. It still remains a disputed question whether the higher energies of civilization can be displayed under the effeminating influences of southern climates. However this may be, it is certain that the vigor and antagonistic spirit of man have been most highly provoked by the bluster and cold, not to say the fury, of northern climates. Thus far in the history of the world Egypt and Carthage furnish the only conspicuous examples of really vigorous peoples who have arisen without the spur of the frost and the sting of the snowflake.

The countries of the Aryan races have favored development.

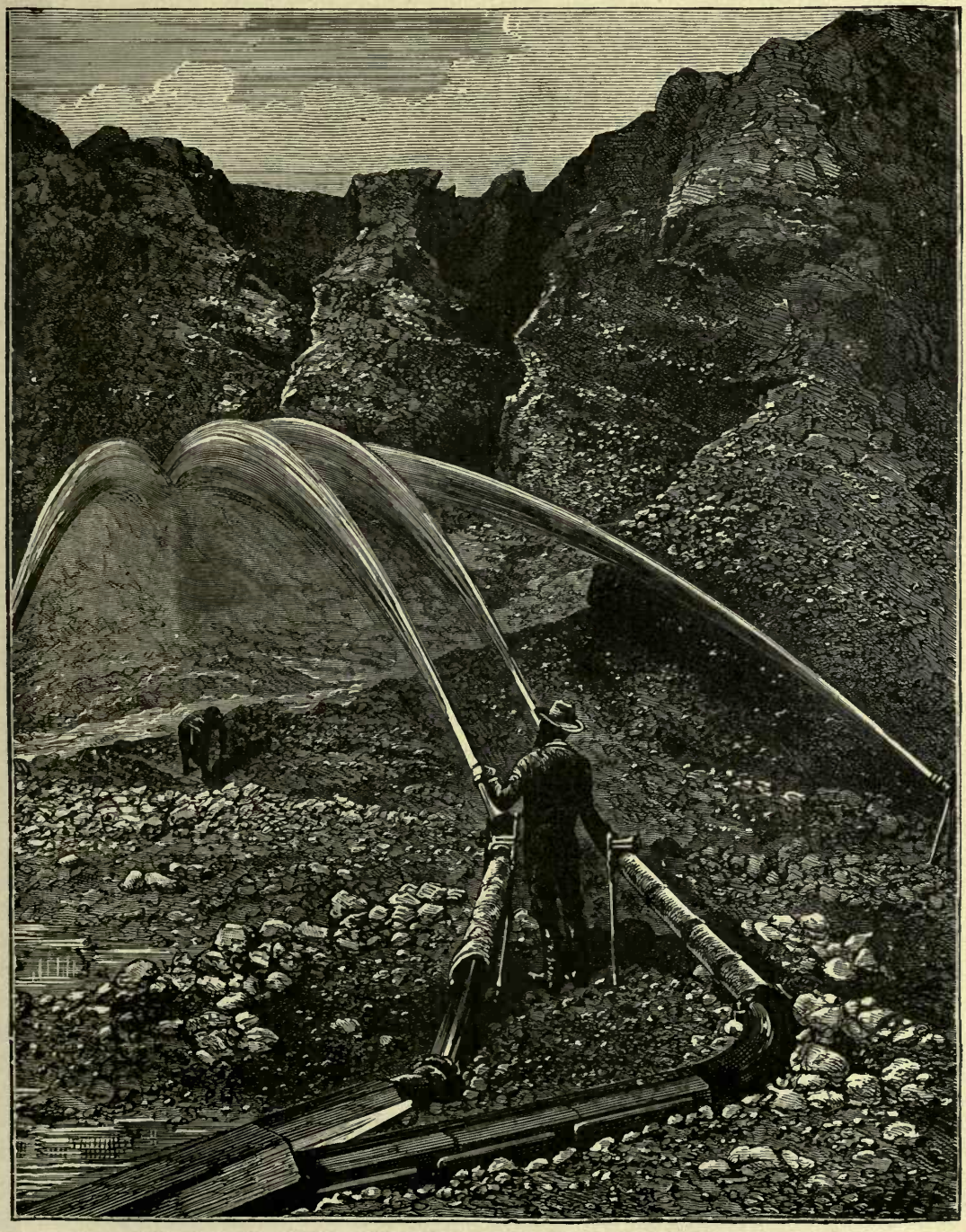
There are also certain subjective reasons for the preëminence of the Aryan race as a modifying force on the surface of the earth. These peoples have an instinctive curiosity to scrutinize and manage the elements of nature. The Aryan, from our first acquaintance with him in the shadows of prehistoric ages, has been curious to know, to theorize, to experiment with the phenomena and laws of the material world. In the most primitive epoch of his activity he created a mythology in explanation of the aspects and conditions around him. From the time of the awakening of his tribal consciousness he was on the alert to note, and even to record, the movements and caprices of physical nature. He was quick to discover the identities and antagonisms of natural facts, and thus were laid the foundations of those classifications which, in the riper ages of the world, have become science.

Subjective reasons for the strong evolution of the Aryans.

In this respect the Aryans have been strongly discriminated from the peoples of Brown descent, and still more strongly from the Black races of the tropics. It is doubtful if any such thing as natural science has ever suggested itself to the inquiry of thinkers among the Brown peoples of mankind. Doubtless the highest degree of knowledge possessed by any branch of this family is that to which the Chinese have attained, and it

Natural science unknown to the Browns and the Blacks.

is certain that among them the natural sciences are either utterly wanting or



MODIFICATION OF ENVIRONMENT BY APPLICATION OF NATURAL FORCES.—Hydraulic Mining.

else in so crude a condition as to merit no attention from the Western nations. Even from the Hamitic and Semitic families of men the Aryan race is almost equally distinguished by its scientific tendency and attainments. The disposition of the Semitic peoples, and of the Hamites in their best estate. as

among the Egyptians, has been, from the first, to look at nature as a caused phenomenon, and pass immediately to reflection on the nature and character of the *Cause;* while the Aryan mind has had almost a passion for scrutinizing the phenomena themselves, for determining the relations of physical facts, and discovering the laws by which they are governed.

The Aryans have learned and mastered the laws of phenomena.

This subjective difference, as will readily be seen, has led to the scientific ascendency of the Aryan races and to their domination over the earth. That is, the Aryan peoples have mastered the laws of phenomena and subordinated the forces of nature so successfully as to turn them upon their environment, and to compel nature to operate against herself for the benefit of her most intelligent creature. The modification which these peoples have effected in the general aspect of those parts of the world where they have held their career has been resultant from their instinctive curiosity to know and handle the forces of the natural world. If for a moment we contemplate the hydraulic miners at their gigantic task among the gorges of the Sierras, with the uplifted brazen nozzle of their hose throwing a volume of more than a hundred square inches of water, compressed into the destroying impact of a solid column, against the granite mountain side, hurling and hurtling the bowlders and débris as mere sand flying before the blast, we shall see the Aryan mind displayed at its topmost bent and in its most characteristic activity. This intellect delights in attacking the environment and crushing it into subjection. And in this respect it is totally unlike the quiescent and adjustable intellect of the Brown or the Black races.

Extreme sensitiveness of the Aryan races to want.

Still again we may note a second instinct, or at least a subjective quality, in the Aryan peoples which has given them their energy as a modifying force on the surface of the earth. This is *their sensitiveness to want*, and the powerful reäction which such want produces in arousing them to exertion. The stomach was the prehistoric schoolmaster, and hunger was the first professor of natural science. Under the influence of these austere but capable instructors the Aryan responded more quickly than the other pupils of the universal school. The energy displayed by the Aryan races under the influence of hunger, of cold, of need in general, has been a matter of astonishment in all ages. Bodily and mental want has acted upon this race like a passion upon the individual man, and the tremendous exertions growing out of this hunger of body and spirit have told like a storm on all the wild forests and hills and river banks where the Indo-European tribes have made their abodes.

Are Aryan instincts and characteristics effect or cause?

The inquiry will at once arise whether this curiosity to scrutinize the processes of nature and to direct her energies, whether this keen hunger, this anxiety to feed and clothe and build against inclemency which the Aryan race has ever exhibited, is not in the nature of an *effect* rather than a *cause*. Have we not here—thus may ask the reader—a substitution of a result for its antecedent force? Has not such instinct in the Aryan race been developed by the very antagonisms with which it has had to contend? Has not the hunger arisen from the very exposure and wasted energy which has come to the half-barbarian wanderer in the wilds of Northern Europe? Doubtless there are many reasons that may be assigned,

many arguments that may be constructed to answer these questions in the affirmative, thus making it appear that the subjective conditions among the Aryan peoples from which we have deduced their modifying energy in the physical world are not really subjective conditions at all, but merely superinduced modes of activity. But, on the contrary, if we look profoundly into the problem, we shall see still better grounds for admitting the subjective ethnic distinctions which we have here assigned to the people of the Indo-European race.

For, in the first place, it was a matter of *choice* and *preference* on the part of the migrating tribes. In fact, all the peoples of the world, if we except only the colonizations of modern times, have been distributed to their respective quarters of the globe by the unreasoning and but half-conscious choice and preference of the peoples themselves. Why, otherwise, should a tribe of primeval half-barbarians prefer to depart toward the north and enter the bleak regions of storm and snow and desolation? Why should others prefer to traverse the desert? There was at the first no compulsion, no contrivance. There was preference only. The ethnic forces were working out their own results. The long lines of tribal migration, as traced over the surface of the earth, were determined in their course and extent by the choice and instinctive dispositions of the moving masses. True it is that every race of living beings is acted upon by the conditions of the environment, and many second natures are produced by these external causes. But the preference which impels a given animal to adopt a given habitat as his home, is an instinctive choice, not determined, as a rule, by the influences of the external world.

Ethnic preference determines much in race development.

So in a larger degree the rational animal man. The Esquimaux cling to the ice floes, struggle with the walrus, live in their snow huts, and, indeed, suffer all the hardships of the polar circle because *they choose to do it*. And the huge Patagonians, bounding among the rocks at the extreme of the continent, are there from choice, and remain from a tribal preference, for which no explanation other than itself can be assigned. All the selections of the intermediate territories of the world have been made originally by the same unreasoning preference of the original tribes that occupied them. We thus see, after allowing all due influence to the reäctionary effects of nature upon man, that there were fundamental activities in himself which led him to choose his environment and to fix himself in certain conditions and in certain relations with the physical world.

Races choose conditions and conditions reäct on races.

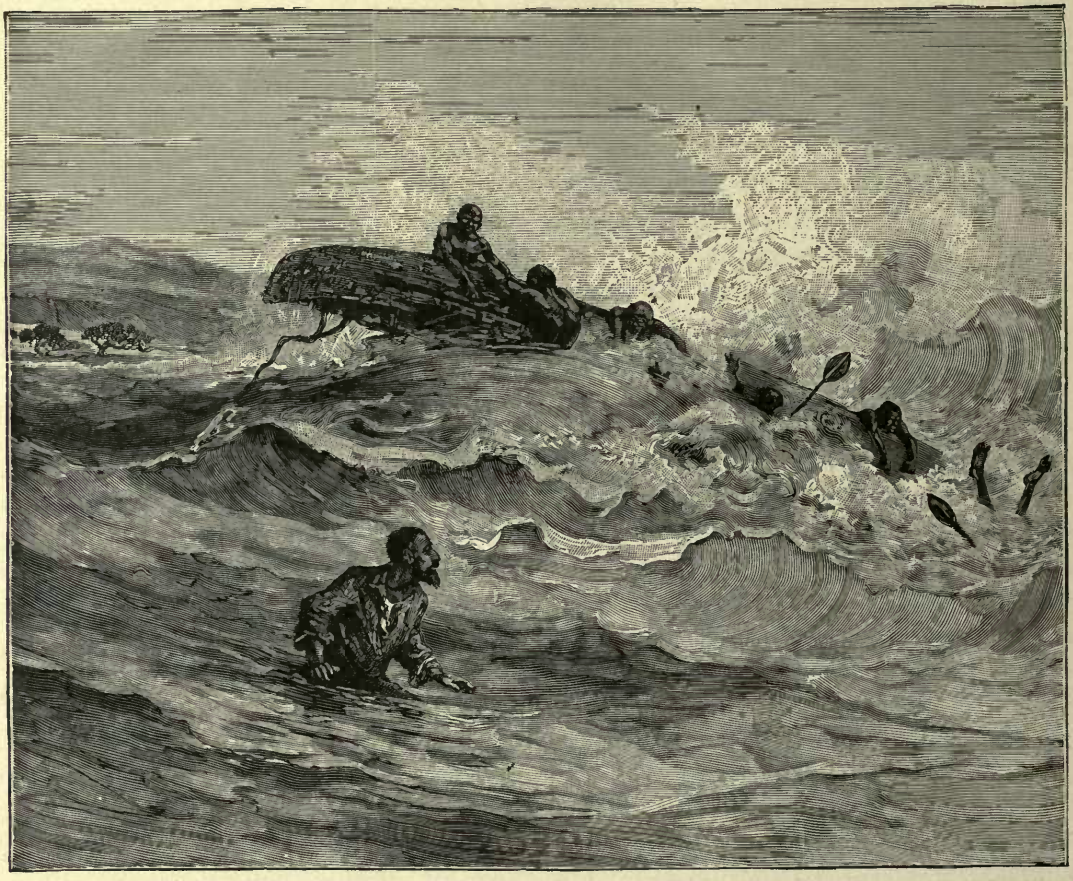
There are not wanting in recent times a large class of profound thinkers who ascribe the march of civilization to the disposition in some advanced races of men to acquaint themselves with the laws of phenomena, and to make those laws available in the administration of life. It would be, doubtless, too much to grant the truth of this theory without restrictions and limitations; but that it expresses a great section of the whole truth can hardly be denied. The last two centuries have been conspicuous in the whole history of the race by the rapid development of scientific knowledge and the consequent subordination of the forces of the natural world to the will of man. It is one of the great secrets of progress, and it has belonged to the Aryan race. It is they who have entered into the arcana of the physical environ-

Great part of human development based on the knowledge of nature.

ment and extracted its principles of action. They have preserved and recorded the invariable sequence in which one natural fact succeeds another, and have given to this sequence the name of law. From this they have deduced the recurrence and the expectation of recurrence among the phenomena of the outer world, and have availed themselves of all the advantages derivable from the knowledge of what is to be. The man who knows what will happen is wise and strong. He who does not know what will happen is foolish and weak. This is said of man in his relations with the natural world. What he understands, he can control. What he can control, he can use. What he can use, is beneficial. Benefit is health and wealth and renown.

Concomitancy of science and the civilized life.

It would be trite to enlarge upon the advantages which the highest races of men have derived from their knowledge of physical nature and the laws by which it is governed. As between this knowledge and the general fact called civilization, defined as it is in our modern languages, it were hard to determine which of the two more powerfully stimulates the other. A certain kind of civilization may exist without the prevalence of scientific knowledge, and a certain kind of scientific knowledge may prevail without inducing a high grade of civilization. But, on the whole, the two are concomitant. The more the man knows the more does he develop and direct the civilizing forces. The



MASTERY OF MAN BY NATURE.—A Boat Wreck.

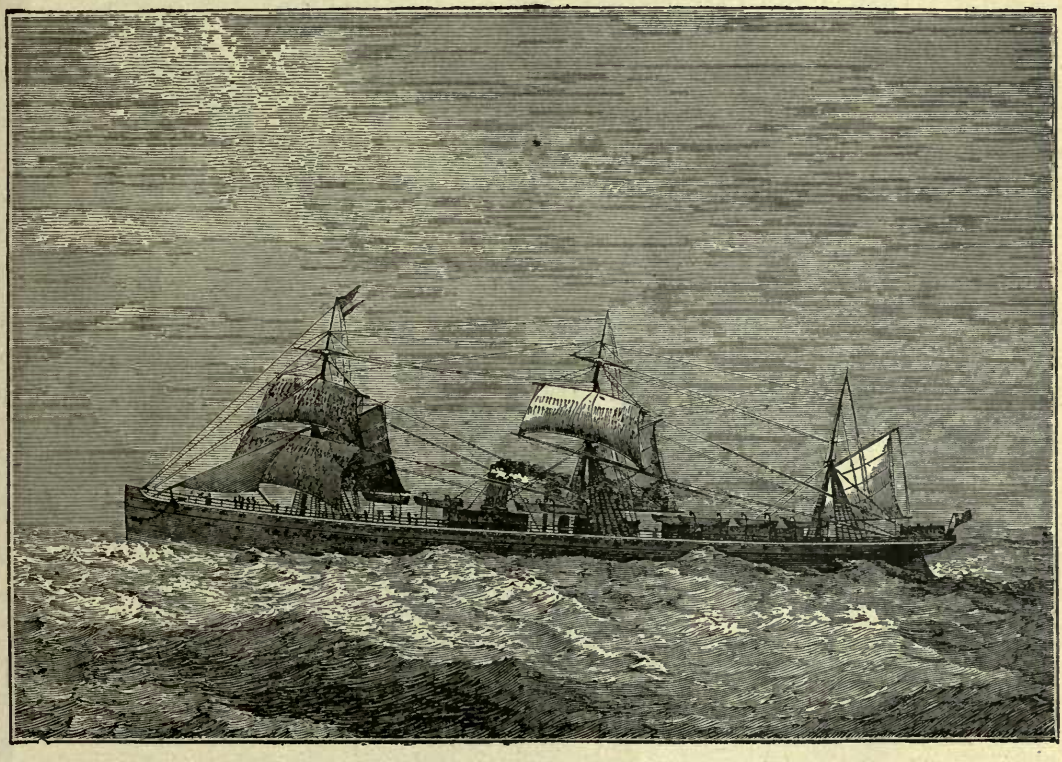
more he uses the forces of civilization the more he knows of the principles by which universal nature is controlled and directed.

Scientific pre-eminence of the Indo-European races.

As compared with the other races, the Aryan stock has been preëminent in these respects. The distinction between them and the Hamitic and Semitic families of men on the line of scientific achievement is sufficiently broad, and when we look at the Brown races of Asia and Polynesia and at the Black races of Africa and Melanesia, we can but be struck with the strong contrast between the indifference of the latter to natural law, their inability to control and direct for benefit the forces of the material world on the one hand, and the breadth and profundity of scientific knowledge and the astonishing benefits derived therefrom by the Aryan, or Indo-European, families of mankind on the other.

Knowledge of natural law a condition of perpetuity.

It is believed that the differences in the intellectual habits and achievements of the several races as viewed from a general point of observation are most distinct and striking with respect to this great fact of natural law and the connection of man with the material world. In general, barbarians and half-civilized peoples are utterly subject to the forces of physical nature. It is not impossible that the weakness of the old forms of civilization, their want of perpetuity, was chiefly attributable to the prevailing ignorance of the laws of phenomena; and it is probable that the strength and permanence of existing institutions are correlated with the prevalence or the non-prevalence of scientific knowledge. This is to say that at least *one* of the conditions



MASTERY OF NATURE BY MAN.—A SCREW STEAMER AT SEA.

of perpetuity among the institutional forms established by mankind is the knowledge of the physical laws by which the world is governed, and the sympathy and concord of man with those laws in the exercise of his activities.

out of Mesopotamia directly to the west and were there developed into the Hebrew and Arabian nations, seem to have dwelt in their mental activities upon the nature and character of the intelligence which preceded and formed and directed

SEMITE CONTEMPLATING NATURE.—Drawn by Paul Hardy.

It was hinted on a preceding page that the Semitic mind had shown itself more concerned with what may be called the Cause of nature than with natural phenomena themselves. From the earliest ages of history the peoples who came

The Semitic mind seeks personality in nature.

not only the isolated facts and processes of the material world, but the world itself and universal nature. It appears to have been in the nature of the Semitic mind to ascribe *personality* and *intelligence* as the cause of phenomena and to pass over the phenomena themselves, their

relations and dependencies, to reflect upon the character and will and work of the personal agent behind the aspects of the material world.

Following out this fundamental concept, the Semitic seer of the primitive world would proceed to the immediate establishment of relations between himself and the personal intelligence beyond the tangible forms of nature. That is, human relationship, according to his views, would spring up, not between man and physical laws and phenomena, but between man and that agent who stood above them. We can easily discern the strong religious tendency which would at once arise from the existence of such a disposition of mind, and we may perceive with equal clearness the absence of scientific knowledge from a system of thought thus originated.

And makes man to be related and bound thereto.

In these facts may be readily discovered the bottom principles of what has been called, in the philosophical and religious discussions of the present century, Semitic monotheism. More properly, however, we should say that the fact indicated is the theory of *immaterial causation*, without respect to its singleness or multiplicity. If we examine the Semitic nations, at our first acquaintance with them, in Chaldæa and Assyria, we shall find that they were polytheistic in their religious development—not polytheistic in the same sense with the Græco-Italic peoples of Europe, but in the same sense with the Hamitic Egyptians. It was the peculiarity of both the Hamitic and Semitic races that they ascribed to the phenomena of the material world immaterial intelligent causes.

Notion of spiritual causation peculiarly Semitic.

This view of the universe and its administration is totally different from polytheism as it was developed by the Aryan nations. In course of time the Aryan also arrived at the concept of immaterial and intelligent causation. But in the earlier ages of these peoples they looked simply at phenomena and gave names thereto, and the names passed, according as the phenomena were vast and majestic, into the catalogue of deities. Aryan polytheism was the result of the combined tendencies of primitive natural philosophy and linguistic growth and decay. It is not intended in this place to elaborate, but only to point out the difference between the fundamental ideas of the Semitic and the Indo-European races. The former conceived of the cause apart from the phenomena and antecedent thereto. The system of religion, therefore, as developed in Mesopotamia, and even transmitted to the West, was an immaterial kathenotheism, as distinguished from the material polytheism of Europe.

This notion differs totally from Aryan polytheism.

The primitive Hebrew fathers revolted against this system because it was polytheistic. Their revolution consisted in the substitution of the monotheistic idea as the bottom fact in the universe. The Hamites never proceeded thus far in the religious evolution. They therefore remained identified in their beliefs with the Mesopotamian people; and the Egyptian system of religion differed only from the Chaldæan in its more elaborate development and its finer philosophical expression. The attempt of certain modern scholars to make it appear that the Aryan Dyaus Pitar of India, the Zeus of the Greeks, and the Jove of Rome were fundamentally the same concept with the Elohim of the Hebrews, is to misconceive the whole question, to confound phenomenon with noumenon, and to obliterate the differ-

Misconception of modern philosophy respecting such difference.

ence between a material and an immaterial causation of nature.

The Brown races have little mythology or religion.

If we look among the Brown races for the highest expression of their thought on the subject we are here considering, we shall find a totally different view of both premises and conclusions. The Chinese and Japanese as the oldest and most thoughtful of the early Brown peoples of Southern and Eastern Asia, gave little heed to the aspects of nature or to the interpretation of what we call natural phenomena. Neither did they concern themselves to seek for causes behind these phenomena, either material or immaterial. As a result, the Chinese have never produced a highly inflected mythology, or what we may properly call a religion. They have risen in their evolution as far as ethics and morality, and on these lines of development have proceeded as far as any other people.

Philosophical view of Chinese system of thought.

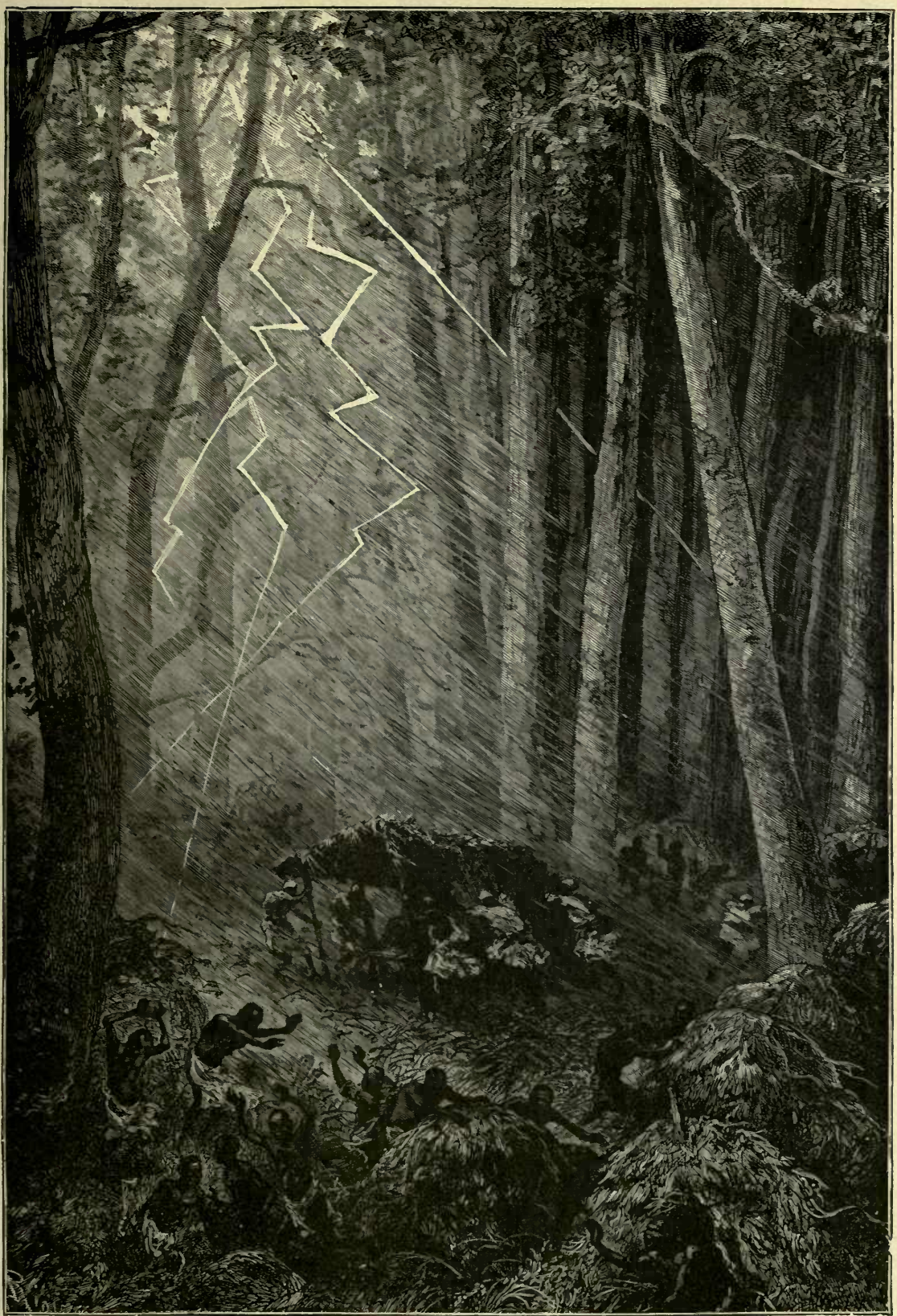
From the first it appears that the Chinese mind has been most concerned not with the facts of nature, but with the facts of life. Their native religions have been simply elaborated systems of ethics. Confucianism is not a religion in the sense in which that word is employed by the Western nations. It is simply a code of human morality as deduced from the life and teaching of the most illustrious sage of the people. The imported Buddhism has in great measure lost its spiritual and subjective peculiarities. In the concept of the Chinese mind it has been transformed into harmony with the older systems native to the nation. If the Chinese can be said to worship at all, it is the worship of life and duty and obligation rather than the adoration of any objective being, whether the same be the highest expression of some supreme thing, as the sky, or of a great Spirit behind and above all aspects of earth and heaven. It will readily be seen that such a view is radically different from the bottom notions upon which the great religious systems of Western Asia and Europe have been erected.

The Black races still lower in the scale of religion.

In their concept of nature and of the author or authors of nature, the Black races have been lowest of all in the scale of rationality. In fact, it has been authentically disputed that some of these peoples have any concept of a moving power among the objects of their sense perceptions. As a general statement, the Blacks in their native condition have risen as high as fetichism and no higher in the religious evolution. Hereafter we shall note with more particularity the peculiarities of their superstitions, and mark out the divergence of their thought from that of the Brown and Ruddy races.

Difference of races respecting the spirit of adventure.

Turning from the subjective differences of mind and thought among the races of antiquity to their *objective activities*, we find a corresponding divergence and distinction of character. The diversity of men of different races in their modes and purposes of action is among the most striking features by which they are discriminated. In what may be called *the spirit of adventure*, for instance, the various races have had each its own distinctive character and method. Some have taken to the water, chosen the maritime life, sailed afar to distant coasts and islands, and made the sea a familiar spirit. To others, the ocean has been a terror, while the continental vastnesses have invited to exploration and even to peril. To other branches of the human family both sea and land have appalled and paralyzed the adventurous



THE BLACKS FEAR NATURE.—Storm in African Forest.—Drawn by Riou.

energies. Such peoples have shrank back from the enticements of exploration and the wild liberty which it affords. They have settled into the safest and most convenient nooks, and shielded themselves from the opposing forces of nature by what barriers soever they could discover in a given environment.

The Ruddy races strongest in the adventurous disposition.

In these respects, we find again that the Ruddy races have been superior to the correlated branches of the human family. It can not be said that their adventure has carried them as far as in the case of the nomadic peoples of Asia—those great Turanians of the Brown race who have drifted through all parts of the greatest of the continents. But the activities of the Aryans have been characterized by greater energy and more rational method. Their migrations have been directed by a purpose, at least a half-formed purpose, to seek for better things and gain the mastery. The Hamites have given a few conspicuous examples of adventure, as when, in times of Pharaoh Neku II, they circumnavigated Africa twenty-one centuries in advance of Vasco da Gama.

Courage of the Browns divorced from rational purpose.

The negative side of adventure is timidity. Adventure is courage. It implies the facing of danger, the willing exposure of the bodily life for the sake of advantage, or even for the mere sake of freedom from restraint. The latter qualities have belonged preëminently to the Ruddy râces. It can not be said that the Brown peoples of Northern Asia are lacking in courage. On the contrary, they have contributed some of the most warlike and fiery spirits which the Western nations have had to meet in combat. But the bravery of the Brown races as it was manifested in the barbarian era was lacking in rationality and the conscious purpose to achieve advantage by victory. The conquests of the Turcomans, hurtling down from the Altais upon the terrified and somewhat effeminated population in Southwestern Asia and Eastern Europe, succeeding as conquests and then sinking into an inane and torpid condition from want of rational purpose and deliberation of method, are at once the striking example and the epitome of the spirit of courage as it has been manifested by the Brown races of mankind.

Undeniable and striking ascendency of the Aryans.

A volume could not suffice to trace out all the diversities of action among the different families of men. The present chapter is devoted merely to a general view of the most conspicuous traits in which the people of one race have differed from those of another. On the whole, the superiority of the Ruddy peoples over the other varieties of mankind, in their masterful relations with the physical world, in their concept of natural phenomena and the laws by which they are governed, in adaptation of means to ends in gaining and maintaining a dominion over the earth, and in the exercise of an adventurous and rational spirit, giving them preëminence and leadership, is undeniable and sufficiently striking.

Ethnic diversity in bodily form and activity.

It may appear, at first glance, a long departure from the subjects which we are here considering to the discussion of *the bodily form and physical activities* of the various peoples of earth. Men have differed according to race not only in their view of the world and in their attitude toward the laws of matter, not only in their concept of the primary principle from which all things have proceeded and by which all things are governed, not only in their notion relative to duty, obligation, and destiny, but also

in the material organism in which for the period of life all thought is resident and from which all forms of activity proceed. In fact, the bodily form and features of the different races are the most conspicuous single circumstance as well as the easiest criterion by which those races are distinguished the one from the other.

Such diversity dates back to the earliest ages.

We are not able to penetrate through the shadows of the prehistoric ages to a time when these very tangible evidences of ethnic divergence did not exist as they exist to-day. Time and again we have repeated what is perfectly well known to historians and antiquaries, that the very oldest monuments which modern times have inherited from antiquity bear mute but indubitable evidence to the fact that, in the earliest ages to which we can in any wise penetrate, the physical divergence of the different branches of mankind was as conspicuously and deeply cut in determinate outlines as at the present time. It is worth while, then, to note with some care the general peculiarities in physical structure of mankind, and to point out the features by which one race of men is most notably and permanently discriminated from the others.

Great diversity in the stature and bulk of men.

In the first place, as to the bulk and stature of the human body. It will be found on an examination of the facts within reach of the inquirer that very great diversity exists among men of different races in these respects. On the whole, it does not appear that the people of antiquity were specially different in stature and weight from the peoples of modern times. It might be difficult to determine whether the race, considered as a whole, tends, in its evolutionary processes, to the production of larger or smaller individual members of the species.

Tradition has preserved the shadowy recollection of both giants and pygmies in the ancient world, and from the monumental delineation of figures we are able to determine that the average peoples were about of the same stature as those of to-day. Among the Assyrian and Egyptian sculptures this fact is abundantly illustrated. But while this is true, it is clear that, on the whole, the smaller peoples of antiquity, as well as in modern ages, were among the aborigines and barbarous tribes, while those of great stature and gigantic bulk were derived from the progressive and well-developed families of mankind.

This will appear at first glance as an evidence of the truth of the evolutionary process. Casually, it may be observed that the body of man has been developed from a comparatively insignificant race of ancestral savages. It is known to the biologist that all existing species of horse have been derived from a single prehistoric typical animal known as *Hipparion elegans;* and it is also known that this primitive animal was of very small stature, so small, indeed, that it would seem impossible that the enormous Norman or Clydesdale stallion of our day could have been derived from so diminutive an ancestor. There is one circumstance, however, which breaks the analogy so far as the development of the human body is concerned; that is, that the most intellectual and powerful peoples, civilly, socially, and politically considered, have not been those of largest stature. This is to say that if the evolutionary process is to be accepted as an explanation of

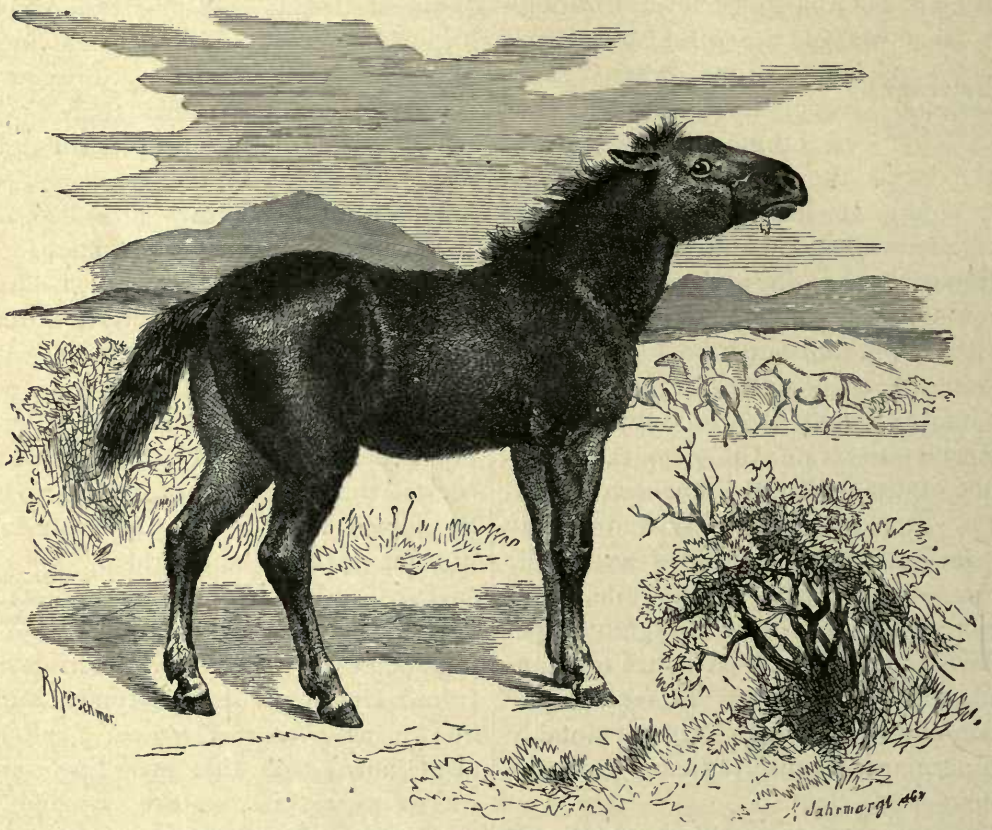
Correlations of mind and body in evolution.

the large size of some races as compared with the diminutive stature of others, there is a clear break in the analogy of bodily and intellectual evolution—a thing that may be difficult of explanation.

It is not intended in these pages to enter into the abstruse and difficult questions of biology. Such matters may be remanded to specialists and to the skill and scholarship of the future.

The lowest limits of size in the human race.

It is sufficient to note the great diversity in the size of the members of different races. In a preceding book it was noted that the prehistoric folk who were buried in the stone boxes along the banks of the Cumberland, in North America, were no more than three and a half feet in stature. It is doubtful whether any absolute proof exists of a smaller race of people than these. The native Australians and some of the inhabitants of the Melanesian islands are no more than four feet in stature, and are slender in proportion. These examples may be taken as a *minimum* of size for prehistoric and existing races of men.

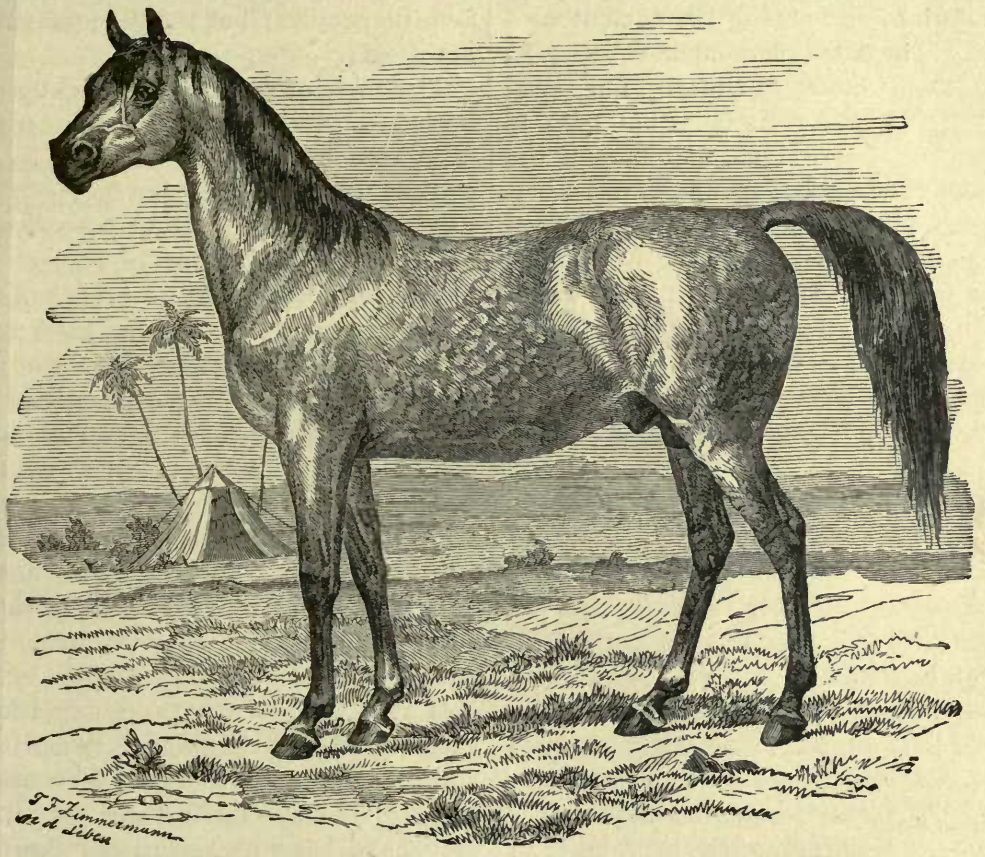


THE TARPAN (FIRST REMOVE FROM THE PRIMITIVE HORSE).

In considering the other extreme, we come to the half-mythical and half-historical giants of the heroic ages. Nearly all races have transmitted to posterity some account of exceptionally enormous specimens of the race, and in some traditions we have accounts of whole tribes conforming to the gigantic pattern. It is impossible to give an authentic average for the stature of the so-called

Maxima of stature; giants and gigantic races.

giants of antiquity. Goliath of Gath was reputed to be nine feet nine inches in height. We have hints in Homer of towering warriors who might well be called gigantic. Some of the largest specimens of the human race have in modern times been brought out of Syria. The Teutones and Gauls were, among barbarians, notoriously huge in body. The paragraph in Cæsar's *Gallic War*, wherein he recites the ridicule which the Gaulish warriors of the Aduatuci bestowed on his Roman legionaries on account of their diminutive stature (*brevitas nostra*), will not be forgotten.



AN ARAB STEED (GREATEST REMOVE FROM PRIMITIVE TYPE).—Drawn by T. F. Zimmermann.

The most conspicuous example of an assemblage, or collection, of giants within the historical era was that resulting from the caprice of Frederick William I. His regiment, known as the Potsdam Guards, was made up of men gathered from all parts of Europe, the smallest of whom was over seven feet in height. They reached a maximum of nine feet, and it is perhaps not beyond the truth to assign an average of eight feet for the whole regiment. We may accept this then, as the *maximum* stature of our race, though possibly exceptional instances may have shown greater height.

Whether the Blacks have contributed any specimens worthy to be classified as giants can not be stated with certainty. Among the Brown races, the most conspicuous examples of greatness of size are given by the Asiatic Mongoloids in Patagonia. Many of these exceed

Largest examples of human beings among the Browns.

seven feet in stature, and it is known that among their far ethnic kinspeople, the Chinese, equally exaggerated specimens of mankind have been found —this, too, among a people who are conspicuously below the average in stature.

To generalize these results, we find very great departures from the common standard of size among the ancient peoples. The same phenomenon recurs in modern times. This variation extends not only to individual members of the human species, but to whole races. It appears that, considered as races, there were smaller peoples in the prehistoric than in the modern world. It would also seem that in ancient times the exaggeration of size above the average standard was as conspicuous as in recent ages. On the whole, the White races are larger in stature than any other people. Among these, the Aryans are conspicuously above the average; and of the Aryans, the largest are those who have been exposed to the rigors of northern climates, but not in the high latitudes.

Aryan peoples reach the highest average stature.

As between the barbarian and the civilized state of man, there is not much difference as to size. On the whole, the barbarian is larger, on the average, than his contemporary from the civilized states. Geographically, the distribution of the largest races has been in the temperate zones. Beyond a certain degree of cold the human family has been somewhat dwarfed, rather than stimulated into extraordinary growth. The polar people are small in stature. The insular populations of the world present the same variations as those of the continents. The primitive Saxons of our ancestral islands were huge in body and highly muscular. The Japanese, similarly situated, are small in stature and delicate in development. On the whole, there was not much difference in the stature and muscular power of the three great branches of the Ruddy race. The advantage was in favor of the Aryans, and the Hamites appear to have been somewhat weaker and smaller than the Semitic peoples; but the distinction was not great.

Geographical situation and the size of the body.

The races of men have generally preserved a given type and standard of form and stature from our earliest acquaintance therewith to the present time. The sarcophagi of Egypt, the dish-covered tombs of Assyria, and the burying grounds of Chaldæa have made us acquainted with the stature and proportions of at least three peoples of remote antiquity. The Assyrians were not taller than the average of modern peoples, but were exceedingly stout and muscular, like the Romans. The Chaldæans were of the average height and form. The mummies of Egypt are below the average standard in height and in general proportions.

Form and stature of men have been preserved from antiquity.

If we descend from the general form and stature of the different peoples of ancient and modern times to consider some of the special features by which they have been characterized, the first to attract our attention is the size, shape, and capacity of the head. This organ, indeed, is about the only one with which the historian and ethnographer need to concern himself. The established fact that the intellect of man resides in his brain, and is correlated in its manifestations with that organ, and the additional fact that the mind is the agent of all that has been accomplished by the human race, may warrant us in looking at the cranial development of the different

peoples as an interesting study in ethnic history.

Constant relation between the size of the brain and human energy.

There is a constant relation between the size and formation of the brain and the active energy of the race. The facts connected with this important study have been gathered from many sources, and may now be studied on the scientific basis. It is found that there is an ascending ethnic scale of cranial development, beginning with the Australians and Papuans and proceeding upwards, through the Black races of Africa, to the Asiatic and Polynesian Mongoloids, and thence to the Ruddy peoples of Europe and America. It will not be considered a materializing digression to note this fact, to dwell upon it, and to point out the perfect correlation existing between the average capacity of the brain and the grade of civilization to which the people of that average have attained. The law is: small brain, little achievement; great brain, great achievement. It is not necessary to refer the progress of civilization to the mere physical fact of cranial growth. A more rational view is that the larger display of mental power is correlated with the size and activity of the organ by which that mental power is expressed.

It has been found that a large variableness exists among the races with respect to the volume and weight of that organ upon which all thought depends. The size and the capacity of the brain in the different races of men have been carefully examined, and the results tabulated in a form that may be easily apprehended. The following table, presenting these results in a concise form, is from Winchell's *Preadamites*, and may be regarded as an accurate and indisputable summary of the best that is known relative to the race gradation of men on the line of cranial capacity:

Winchell's table of cranial capacity of races.

TABLE OF CRANIAL CAPACITIES.

No. of Specimens.	Races.	Cubic Centimeters. Men.	Women.	Average.	Authority.
	I. RUDDY RACES.				
570	Aryans of S. W. Europe	1,576	1,395	1,485	Broca.
38	Europeans	....	....	1,534	Morton.
293	Britons, Anglo-Saxons, Swedes, Irish, Netherlanders	....	....	1,482	Davis.
901	Ruddy Races, mean capacity	....	....	1,500 1,486	
	II. BROWN RACES.				
22	Chinese	1,518	1,383	1,450	Broca.
21	Chinese	....	....	1,452	Davis.
18	Mongols	....	....	1,421	Morton.
12	Esquimaux	1,539	1,428	1,488	Broca.
7	Asiatic Esquimaux	....	....	1,488	Dall.
6	N. W. American Esquimaux	....	....	1,270	Dall.
101	Greenland Esquimaux	....	....	1,250	Bessels.
126	Esquimaux, mean capacity	....	....	1,372 1,286	
61	Chinese and Mongols, mean capacity	....	....	1,441 1,442	
187	Mongoloids, mean capacity	....	....	1,403 1,338	
	III. BLACK RACES.				
85	Negroes, W. Africa	1,430	1,251	1,345	Broca.
79	Negroes of Africa	....	....	1,364	Morton.
12	Dahoman Negroes	....	....	1,452	Davis.
176	Negroes, mean capacity	....	....	1,387 1,360	
18	Australians	1,347	1,181	1,264	Broca.
15	Australians	....	....	1,295	Davis.
33	Australians, mean capacity	....	....	1,279 1,276	

Deductions from the tables; lowest forms of man-life.

From the foregoing schedule it will be seen that the native Australians are the lowest type of men in cranial capacity, being inferior in this respect to the Negroes by an average of eighty-four cubic centimeters. The table does not include the Hottentots as a separate study. These people, as a matter of fact, have a cranial development intermediate between the Australians and the Negroes. Again, it will be noted that the Mongoloids have an average capacity of eighty-two cubic centimeters in excess of the Negroes, while the average capacity of the Aryans is forty-four cubic centimeters above the measure of the Mongoloids. It will also be observed that the preceding table does not exhibit the relative size of the brain of the Papu-

ans, but from other sources this has been found to be above that of the Australians, and nearly identical with that of the Hottentots.

Relation of brain capacity to other physical features.

It may well be confessed that this physical index discovered in the capacity of the brain for the several races points distinctly to a certain grade of rational activity and progressive power in each people. Here, then, is the fundamental fact of a certain quantity of brain forces expended in the administration of life among the various peoples of the earth. The same is correlated with other peculiarities of anatomical structure. It is found that the cranial cavity is very variable in its shape, conforming in its proportions and relative distribution of parts to the general configuration of the skull. And this is typical in each of the primary races. It is not the place to enter into any elaborate illustration of the definite angles and peculiarities of the human skull, or to describe by comparisons its various approximations to the crania of other animals. Such discussion belongs to special scientific treatises, and the results derivable therefrom could play but a small part in the ethnic history of mankind.

The same is true of the other bodily organs. It is well known that the lower types of the human family approximate in various degrees to the form and organism of certain quadrumana, and that these close analogies, even identities, have given rise to much speculation about the connection between the bottom selvage of the human race and the upper margin of the animal kingdom. How near together these two edges of life may approximate, or how far apart they may be found to lie, it is not the duty of the historian, or even the ethnographer, to determine. Certain it is that the highest types of men have a very marked divergence from all species of quadrupeds, and it will certainly be admitted that the lowest orders of mankind have in them at least the potentiality of a rational, and possibly an elevated, life.

Selvage of mankind and the lower animals.

The nearest approach in anatomical structure in the human species to the lower orders of nature is found in the Bushmen of South Africa, the native Australians, and the Papuans of Melanesia. Specimens of men have been found among the native races of Central America and in South America almost equally near akin on the physical side with the simians and other superior orders of animals. The peculiarities which constitute this physical affinity of man with the brutes are well known. The arms of the lower orders of men are very long, reaching to the knees or below the knees when the person is erect. The hands also are spread out and set on the wrists after the manner of forefeet in the quadrupeds. The feet are strikingly animal in their structure, having a long heel and so flat an instep that the whole bottom of the foot is pressed on the ground. Rising from these expressionless parts of the body to the features of the face, we find them also strongly marked with animal characteristics. The chin in many cases is scarcely better developed than in the chimpanzee, and the forehead slopes back from the brow with scarcely greater elevation than is found in the orang or ape.

Approximation of certain Blacks to the simians.

From these low grades of development in the human form, there is a gradual ascent from the level of the Hottentot and Australian, through the Negroes and the barbarous aborigines of South

America and the Pacific islands to the Esquimaux, thence to the nomadic races of Asia, and thence to the highly-developed physical form of the Europeans. It should be noted, however, that occasionally among the natives of Polynesia and South America, and also among the native races of North America, an exceptional example of high personal beauty of form and feature will be discovered. Such instances may be regarded as the premonitory outgoings of nature relative to what the race may become in its better stages of development.

Hints in low races of future development.

We have now arrived at that point in the inquiry where the general view which takes in the higher relations of the races descends into particulars and widens to infinity. Were we to pursue the subject further in the present chapter, it would be to consider what may be called the tangible parts or evidences of civilization as illustrative of race character in different ages and countries. As already said, the three great means of supporting and developing human life are food, clothing, and shelter. The manner of man's activities in procuring these essentials of his own existence and the perpetuity of his kind would demand in its exemplification a great amount of space and variety of inquiry.

The three principal things, food, clothing, and shelter.

On the side of food, the problem would begin with the appropriation of the simplest vegetable products by the primitive races, and would end with the most highly elaborated and carefully prepared tissues of animals. This is to say that food begins with the starchy elements in vegetation, just as they are distilled and manufactured by nature, in vegetable cells, and ends with the highest form of nitrogenous product in the animal kingdom. To procure the latter requires all the refinements of skill and contrivances of art. On the side of clothing, the question is first with the appropriation of the skins of beasts, the mere transfer of the natural covering of a dead animal to the body of a living one. It ends with the finest and most delicately wrought fabrics which the ingenuity and caprice of civilized races have been able to invent. On the side of shelter, it begins with a piece of bark set up at an angle between a witless savage and the rain. It ends with the villa and the palace, shining down with marble front over boughs of bending myrtle and avenues of evergreen and fountains of flashing water.

Range of ethnic differences in procuring essentials of life.

The activities of the different races of mankind have been exerted primarily in the three directions above indicated; but the methods of exertion have been as variable and multiform as the tribes of the human race. In the first place, the earth herself has been capricious in the distribution and character of her natural gifts. Men have adapted themselves to this whimsicality of the natural world. But with the progress and development of the race, they have first gone beyond and then ignored the hints of nature relative to subsistence, and have transplanted and wrought in a way suggested by their instinctive appetencies and ethnic preference.

Method of man in adapting himself to nature.

It is in this way that the human race has done so much in the way of diffusing the natural products of the earth. In his adjustment with the means of subsistence, natural and artificial, man has changed first himself and afterwards his surroundings. At the beginning he fitted and adjusted himself simply to natural conditions; but these he soon

Adjustment varies from natural to artificial conditions.

outgrew and overpassed in development. It is in this respect again that the races have shown remarkable diversity. The life of some has become highly artificial, while in others the natural life predominates as from the first. The Hamitic race in all of its development remained close to the soil. The somewhat complex life of the ancient Egyptians was, nevertheless, of the earth, earthy. No concept of Egyptian civilization is at all adequate which has not the mud of the Nile at the bottom. It was founded on the ground, and its highest aspirations rose no higher than a basket of lotus on the head of a peasant.

Among the Semites, the evolution of food took place more rapidly than that of either raiment or architecture. For some reason these peoples bestowed especial attention upon the materials upon which they subsisted. Even on their first emergence from the prehistoric shadows we find them classifying and arranging their foods, especially those deduced from the animal kingdom, by the distinction of clean and unclean. In common with the Hamites, they refined upon this idea, and carried it into their religious system. But unlike the Hamites, they were not, especially in the first stages of their development, a people much interested in architecture. The pastoral life which they adopted was unfavorable to building, and even when they settled into fixed communities and became husbandmen and keepers of vineyards, they were still indifferent to building. The records of the Semitic race would be searched in vain for even the shadows of such architectural grandeur as was displayed in the valley of the Nile or in the opposite peninsula of Hellas.

Evolution of food precedes building and clothing.

The Brown races, such as the Chinese Mongolians, have always led a simple and somewhat primitive life. Their means of subsistence have remained primary. We may well be surprised, when we reflect upon the antiquity of the Chinese nation and upon the intellectual astuteness of the race, to note the really primitive condition of their industrial and social life. Their building is, at its best estate, a piece of Oriental elegance, never rising to the grand or sublime. Their raiment has perhaps never been changed in its character or material for a thousand years, and their food is as simple as it was in the days of Confucius. In the midst of much intellectual acumen and a certain kind of perpetual industry, they have signally failed to advance into the higher forms of physical culture and development.

The Chinese exemplify the retardation of architecture.

The Black races have scarcely attained, in their industrial and social state, to a higher level than that of aboriginal tribes. In respect of food, clothing, and shelter, they are savages, but the peaceful character of the race has forbidden the display on a large scale of either the savage instincts or the savage virtues. The Blacks have shown no skill in their native places in the adaptation of means to ends, and have, therefore, made no progress in those primary industries on which the civilized state of man is founded.

The Blacks are unprogressive in all the conditions of life.

It is the Aryan race again that has shown itself preëminent in its adaptations to the natural resources of the earth, and in improving upon the conditions and methods suggested by nature. We have already seen that the face of the earth has, to a considerable degree, been transformed by the energy and force of

The Aryans preeminent in mastery of natural resources.

character of the Aryan peoples. In no respect has their departure from the primitive condition of mankind been more marked than with regard to the resources by which life is supported and made strong. The Aryan peoples, at least the Western Aryans, have all advanced from the primitive foods to the higher and more complex form of organic tissue in which the elements of subsistence are most highly condensed. The race might be defined as "the people who eat costly food." A second nature has been produced in all Indo-European countries requiring sustenance from the most costly elements of nature; and for the production and distribution of these, great systems of industry and commerce have been instituted, developing the energies and perfecting the skill of the most active communities in the world. The same refinement and advance may be observed in regard to the means by which the human body is defended from the vicissitudes and rigors of climate. This is said of the materials which the civilized peoples of the West employ in clothing, rather than of their skill in fabrication.

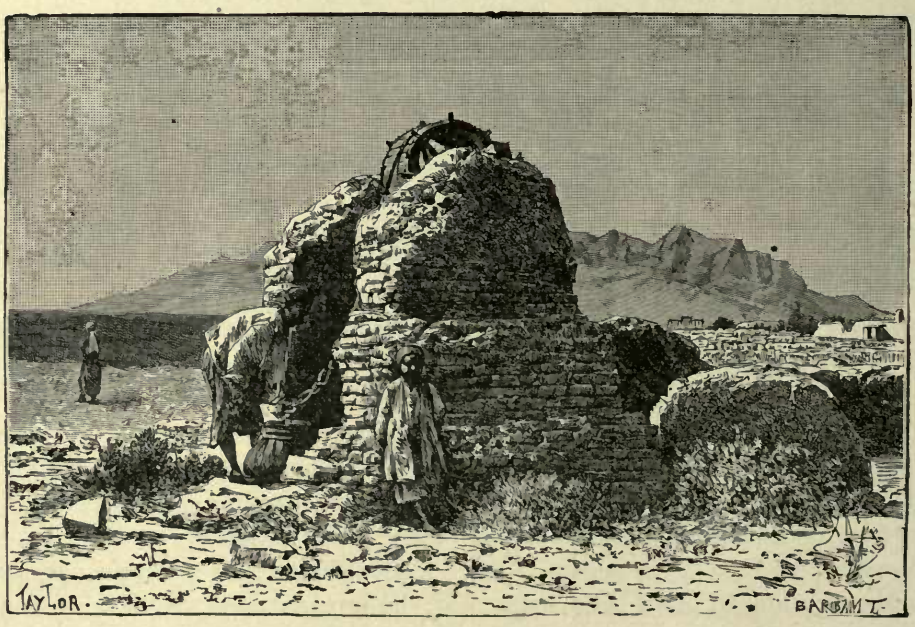
LOW INDUSTRIAL ESTATE OF THE BROWN AND BLACK RACES.—POST OF THE GRAND TALIBOUCHE.
Drawn by Y. Pranishnikoff.

As builders, the Aryans appear just at the present age to be entering into the era of splendid and substantial architecture. Strangely enough the race, though marked by unusual skill and en-

ergy in the handling of materials, has not been conspicuous in recent ages for its ability to build. Among the ancients, the only Aryan peoples noted for their preëminence in architecture were the Greeks and Romans, and the latter were only imitators of the former. The belief that even the skillful and artistic Greeks derived their architectural forms and methods from the Hamitic Egyptians seems to be well supported by historical evidence. From which it would appear that the Hamites of the Nile valley were the first great original builders—the first of the human race to create architectural monuments.

Place of the Aryans in the architectural evolution.

As already intimated, however, the discussion of these topics leads us immediately into the subject-matter which has been reserved for the detailed account of the industrial and social life of the different races of mankind. We have now reached the threshold of that discussion. In the former chapters we have endeavored to delineate the primitive condition of the human race, and the tribal departures and migrations by which the race was originally distributed to the various quarters of the globe. In the current chapter we have endeavored to look down, as from a high point of view, upon the various families of men, and to note a few of the leading features by which they are distinguished. We shall now take up for consideration the details of the methods and manner of life among the principal families of mankind, and shall attempt to depict the essential facts and some of the peculiar incidents in the past and present condition of the leading divisions of our race.



RACE CHART No. 2

SHOWING THE GEOGRAPHICAL DISTRIBUTION OF THE EAST ARYANS.

Note.—In the Race Maps of this work, the scheme suggested by Winchell has been followed to a considerable extent.

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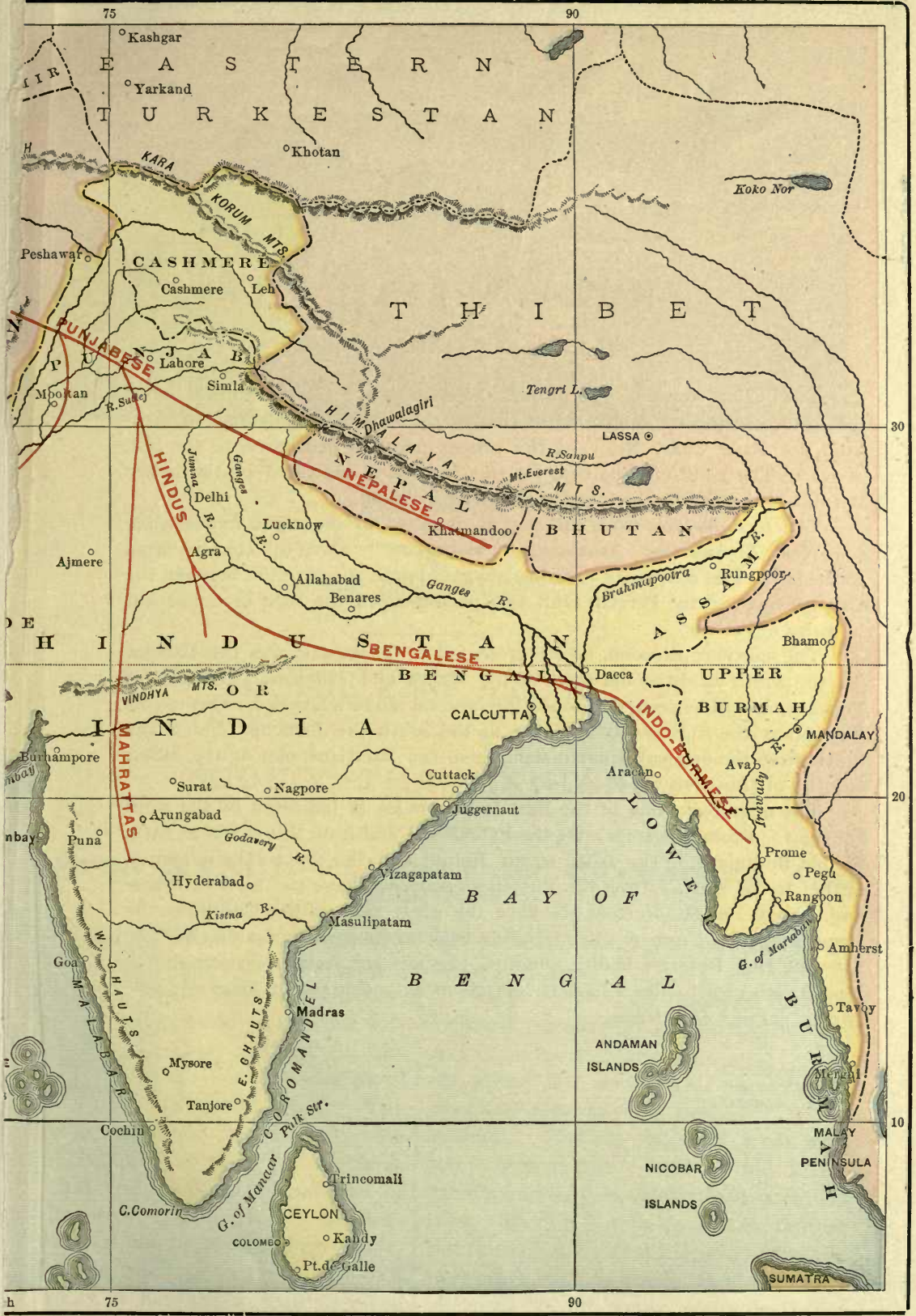

75
90
30
20
10
Kashgar
Yarkand
Khotan
EASTERN TURKESTAN
KARA KORUM MTS.
Koko Nor
Peshawar
CASHMERE
Cashmere
Leh
THIBET
PUNJABESE
PUNJAB
Lahore
Simla
Mooltan
R. Sutlej
Tengri L.
Dhawalagiri
HIMALAYA MTS.
LASSA
R. Sanpu
Mt. Everest
NEPALESE
NEPAL
Khatmandoo
BHUTAN
HINDUS
Jumna R.
Ganges R.
Delhi
Lucknow
Agra
Ajmere
Allahabad
Benares
Ganges R.
Brahmapootra R.
Rungpoor
ASSAM
HINDUSTAN
BENGALESE
BENGAL
Dacca
Bhamo
UPPER BURMAH
VINDHYA MTS.
OR INDIA
CALCUTTA
INDO-BURMESE
MANDALAY
Burhampore
Surat
Nagpore
Cuttack
Aracan
Ava
Irrawady R.
MAHRATTAS
Arungabad
Juggernaut
Puna
Godavery R.
Prome
Pegu
Hyderabad
Vizagapatam
Rangoon
LOWER BURMAH
BAY OF BENGAL
Kistna R.
Masulipatam
G. of Martaban
Amherst
Goa
W. GHAUTS
MALABAR
Madras
Tavoy
ANDAMAN ISLANDS
Mergui
Mysore
E. GHAUTS
COROMANDEL
Tanjore
Pulk Str.
Cochin
MALAY PENINSULA
NICOBAR ISLANDS
Trincomali
C. Comorin
G. of Manaar
CEYLON
COLOMBO
Kandy
Pt. de Galle
SUMATRA

RACE CHART No. 2.

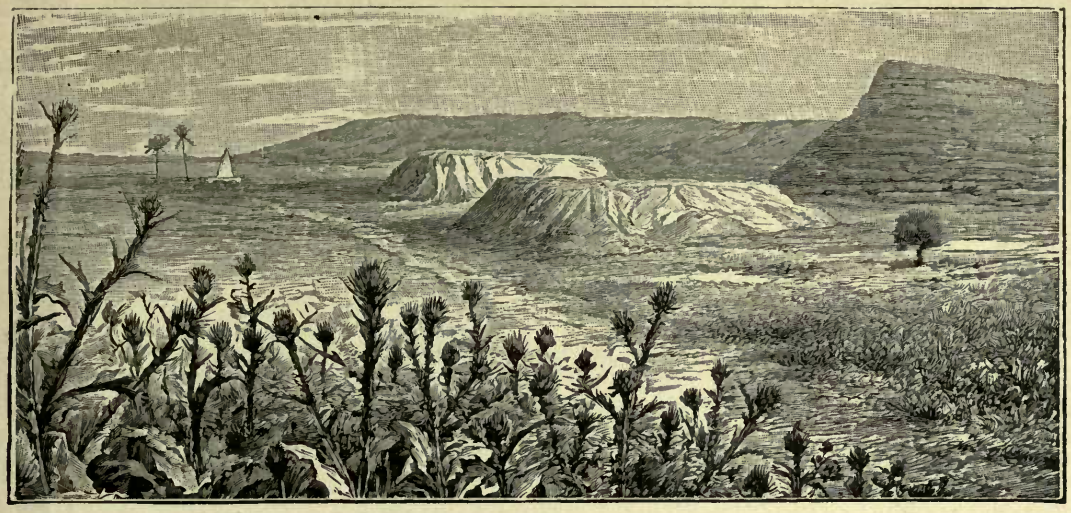
EXPLANATION.

THIS Chart shows the geographical spread of the East Aryan family of mankind. (For the connection of this stock with the whole race of mankind, see Race Chart No. 1, at the proper point of departure, to the left, above.) The point of departure for this division is indicated by the heavy red line at the foot of the Caspian Sea, near Teheran.

The East Aryans, from this region, departed to the right hand; while the West Aryans (see "Armenians," "Georgians," "Ossetes," etc.) departed to the left. The movement extended eastward until the stricture between the Caspian Sea and the Persian Gulf was passed, when the race branched out in many directions.

The northern division, now represented in Turkestan, was the Usbeks. To the south were the old races of the Medes and Persians. The ancient Persians, as will be seen, developed into several modern families. Out of this line sprang the Afghans, and further to the south the Beluchs. Far to the north, from the original Iranian stem, arise the Bactrians, one of the oldest families of this division.

The migratory stem of the East Indian races is indicated by the word Indicans. From this stem arise the Punjabese; and from this stock, in turn, the old Brahmans, in the valley of the Indus; and the great Hindu family, farther to the East. From the Punjabese stem, we have the modern Nepalese. From the Hindu stem, we have the great races of the Mahrattas, the Bengalese, etc. From the Bengalese division, at its easternmost extreme, we have the Indo-Burmese family, which is the remotest Asiatic division of the East Aryan races. The Chart covers about fifty degrees of longitude, and twenty degrees of latitude.



Part Third.

THE RUDDY RACES.

I.—THE EAST ARYANS.

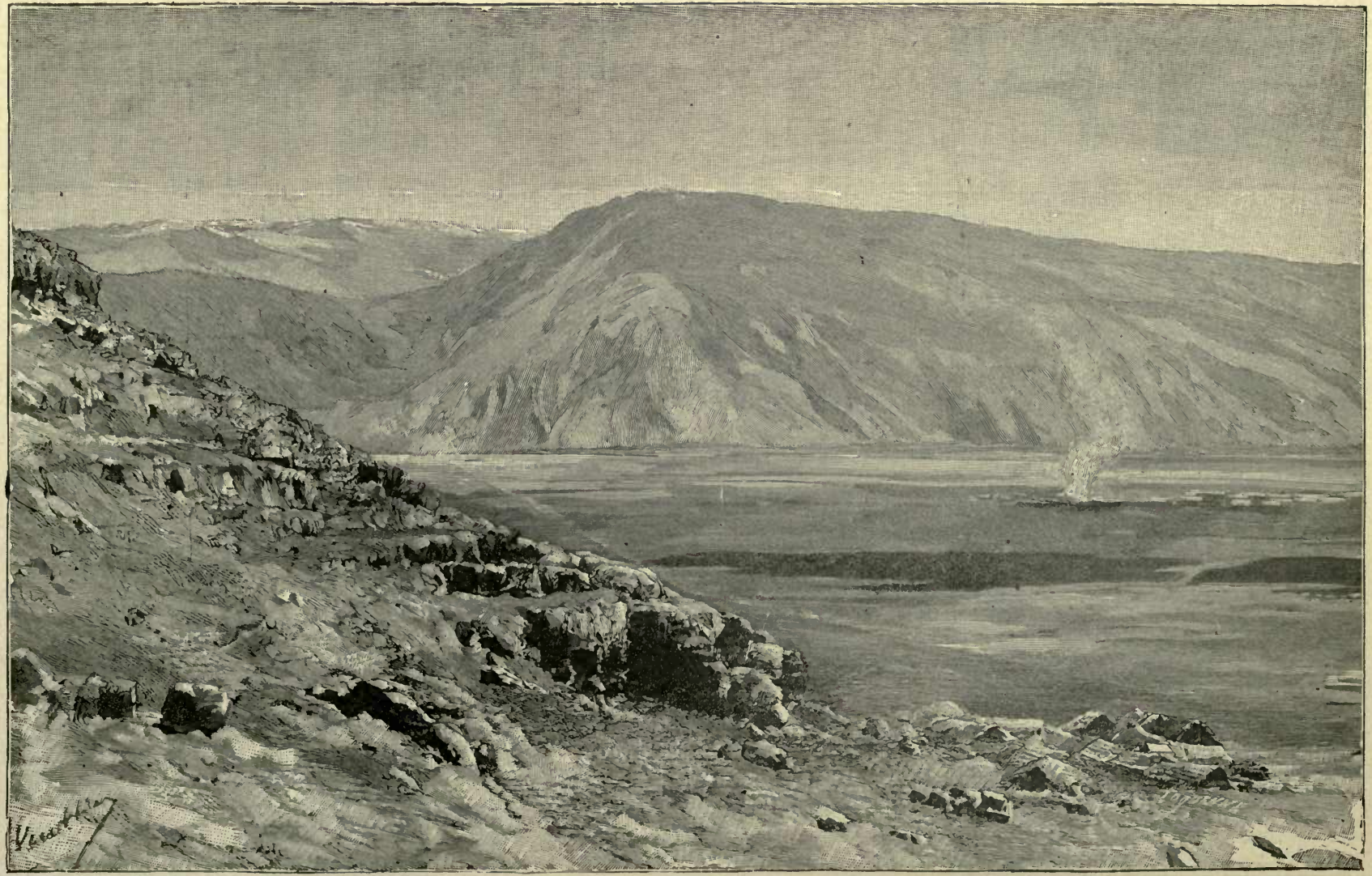
BOOK V.—THE IRANIANS.

CHAPTER XXXIII.—ELEMENTARY CHARACTER AND RELIGION.

OUR oldest kinspeople, reckoning by antiquity of descent, are discoverable along the farthest horizon of history on the plateau of ancient Iran. The country corresponds in general with modern Persia. It must be borne in mind that the political boundaries of antiquity were not generally so definitely drawn as in the modern world. The Semitic races in Western Asia and the Greeks in Eastern Europe were the first to set up termini, and thus to establish definitely the metes and bounds of a political state.

The impulse which carried the Old Iranians southward from the primitive Aryan nidus in the country about the lower Caspian has already been described. We are now to look with some care at the people of the Iranic family, and to note their ethnic peculiarities. It will not be forgotten that at the time of their first dispersion in Iran they were still, as a race, fundamentally identical in character with the other eastern branch of our ancestral kindred.

The inquiry may begin with the Iranians.



IRANIAN LANDSCAPE.—Plateau of Malimir.—Drawn by G. Vuillier, from a photograph.

which was carried into the Punjab and thence down the river valleys of India.

Plateau of Iran invited to horsemanship and outdoor life.

Ancient Iran invited to the nomadic life. This was the first impress which the environment made upon the primitive tribes of our race. At the time of their coming into these open highland regions they had already domesticated the horse and several other species of animals. But the horse was the special companion of the Iranian on his excursions, and it is worthy of note that through all ages of history the preëminence of the Persian steed has been maintained. A household had been organized after the manner which has ever since prevailed among the Aryan races. The relations of fatherhood and motherhood, of sonship and daughtership, had been established, and the home of the group was a tent at first, and a more permanent abode afterwards.

ANIMAL LIFE OF PERSIA.—MOUNTAIN SHEEP OF KEROUT.
Drawn by Tofani, after a photograph by Madame Dieulafoy.

Not only were the common animals known to the primitive Iranians, but also the common cereals and vegetable products. One point of divergence between this branch of the human family and their intimate kinsfolk, the Aryans of India, was with respect to the wild animals, the capture of the same in the chase, and their use for food. The country of Iran was in its natural features and resources promotive of the chase. It was inhabited by all the common varieties of wild beasts peculiar to the plains and mountains in the temperate zone. To the pursuit of these the Iranian tribes gave themselves with zest, and soon became proficient in the capture of even lions and bears and tigers. Another method of life opened to the Eastern Aryans, who gave themselves up to the quiet of the agricultural and domestic life; and it is from this point that one of the striking divergencies in the languages of Iran and India may be noticed. The domestic animals are named in common by the two peoples, while the wild beasts are generally designated by distinct terms invented after the separation of the races.

The desert Iranians become hunters: the Indicans agriculturists

The Iranian life thus presented some diverse and peculiar aspects. It was in one respect the half-barbarous life of the chase, and in another respect the civil-

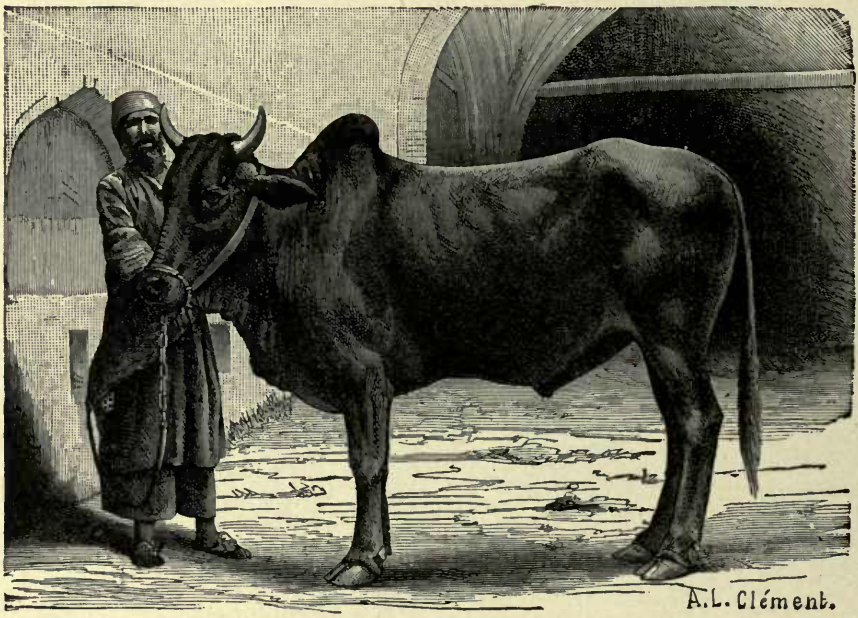
izing life of the field and the garden. In proportion as the first prevailed, the old nomadic and migratory impulse of the race was stimulated into activity; in proportion as the other became predominant, the people were aggregated into settled communities and began to build cities and states. It is worthy of note that the origin of several world-wide varieties of fruits, such as apples, peaches, and plums, has been assigned to Iran.

Both methods of life combine in the race character.

cient race took the course of a subsidence from the nomadic into the agricultural and pastoral life. The change was very gradual, and had been nearly accomplished at our earliest historical acquaintance with the Medes. A more permanent style of building had supervened, and many other evidences of a rising nationality were seen as early as the eighth century before our era.

The sedentary life takes the place of the nomadic.

Before proceeding to delineate the manners and customs, the religious and social state of the Old Iranians, it will be well to describe the personal character of the race. Herodotus and Xenophon have given us full accounts of the appearance of the Medes in their day, and we may conclude that the type was the same which had prevailed from the time of the original tribes. The sculptures of Persepolis also have preserved the person and features of the race, giving us perhaps the most authentic and permanent representation of the ancestors of the Indo-European family of men.



ANIMAL LIFE OF PERSIA.—AN OX OF THE BISHOPRIC.
Drawn by A. L. Clement, after a photograph by Madame Dieulafoy.

It is quite likely that the primitive Medo-Persian peoples were the first to cultivate and improve these valuable products of the vegetable kingdom.[1]

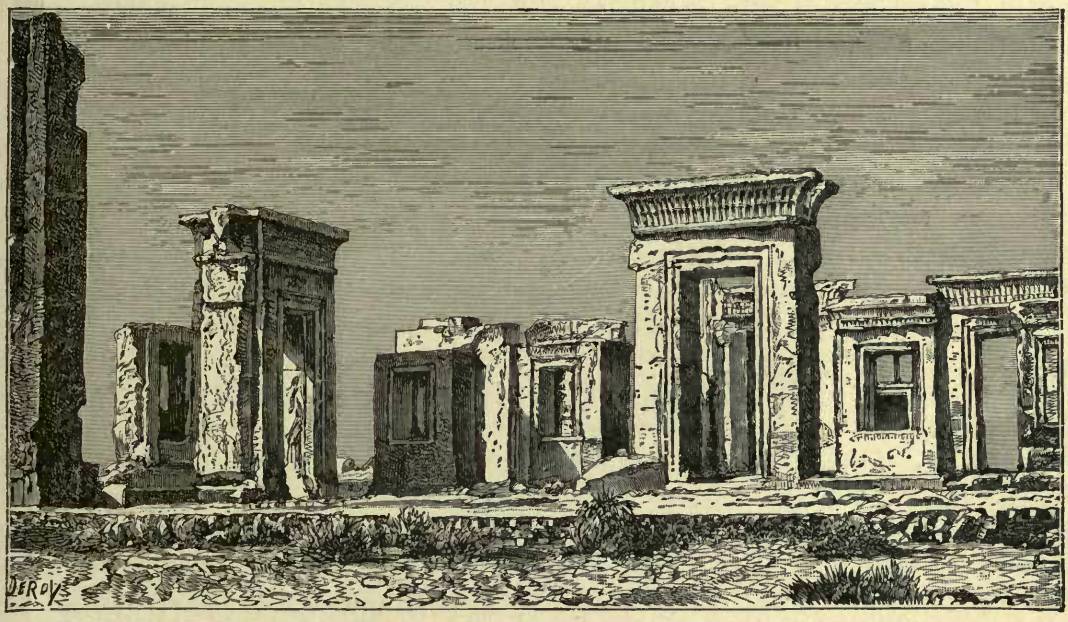
Ethnic and personal character of the Iranians.

The social evolution among this an-

The ancient Iranian was tall and well formed. In personal grace and physical nobility he was almost the equal of his kinsmen, the Hellenes of the West. In strength and activity he was the peer

[1] The definition of "apple-eating animal" might be given to the Old Iranian and to all of his Asiatic and European descendants. The word *apple*, beginning with the Zend and Sanskrit *ap p'hala*, meaning "fruit of the water," or "juicy fruit," is common in nearly every dialect of the Aryan languages! It might be difficult to point out any other term of like universality among the names of the things eaten by men.

not only of his contemporaries in Mesopotamia and Hellas, but of any rival in any age of the world. The features were dignified and finely drawn. The forehead was high and straight. The nose was developed on a line with the frontal bone, after the manner of the Macedonian face, and was prominent and well formed. Sometimes the organ had that imperious and hawklike shape which reäppeared among the Romans of a later age. The beard was manly and heavy, and the hair abundant to superfluity. The Iranian women were admired for their beauty and grace even by the critical Greeks. In dignity of personal carriage, they are represented to have borne themselves after the manner of the barbaric queens of the heroic ages of history.



REMAINS OF IRANIAN BUILDING.—Ruins of the Palace of Darius, at Persepolis.—Drawn by A. Deroy, after a photograph by Madame Dieulafoy.

The environment of the early Iranian tribes brought them into constant contact with the open aspects of the natural world. Their life was outdoors. Perhaps no people have been more constantly exposed to the reäctions of nature than were these progenitors of great races. True, the climate was not auspicious for an out-of-door life. Storms were frequent, and the winters of Parthia, Margiana, and Bactria were tolerably severe. But neither the rain blast of summer nor the rigors of the winter season were sufficient to extinguish or repress the nomadic freedom of the race. To scour the plains on horseback became a second nature to the Iranian, and his preference for chasing wild beasts took the form of a passion.

The race constantly exposed to the influences of nature.

As late as the beginnings of authentic history, not only the evidences, but the actual example of this kind of life was still to be observed. In the times of Herodotus the nations of Iran had not yet settled into permanence or affixed themselves to given districts of territory. They were divided into tribes, some of which had located their settlements and fixed their institutions within definite territories, while others roamed

Tribal divisions of Persians as given by Herodotus.

at large. Among the Medes, the Father of History mentions six tribal division: the Busæ, the Paretaceni, the Struchates, the Arazanti, the Budii, and the Magi. The Persians were, in like manner, divided into the Pasargadæ, the Maraphians, the Maspians, the Panthialæans, the Derusiæans, the Germanians, the Daäns, the Mardians, the Dropicans, and the Sagartians. The last four tribes were still nomadic in the times of Herodotus, while the others had settled on the soil and given themselves to husbandry. The tribes were subdivided into smaller clans, and these into gentes, or households. In this condition of affairs, which we may accept as correct for the middle of the fifth century B. C., we may readily recognize another example of that transforming process by which the family is succeeded in regular order by the gens, the tribe, and the race.

Feebleness of architectural evolution among the Iranians.

At a very early period the intellect of the Iranian nations reäcted under the influences of growth and environment, and began to display itself with considerable vigor. It is to this circumstance, indeed, that the importance of the race in after ages is to be attributed. It was not, indeed, in the direction of architecture and art that this primitive race exhibited its best powers. On the contrary, it may be truthfully alleged that the Medes and Persians were inefficient as builders and artists. It appears that the æsthetic sense was weak, and that even as late as the earlier stages of Medo-Persian nationality the evidences of architectural structure are few and meager. In all Persia the foundations of but two cities have remained to after times, in illustration of the building and decorative capacity of the people. In Media not a single structure has left a trace. It is true that this paucity of architectural monuments is to be accounted for in part by the use of wood rather than stone as the building material of the Iranians. It is believed that the ancient Medes employed neither stone nor brick in their edifices, relying wholly upon wood and the metals even for the palaces of their kings.

Early motion of the literary impulse in the race.

It was on the side of the literary evolution that the Iranian mind first displayed its energies. It fell to chanting the aspects of the natural world and to inventing metrical expression for the mysteries above the material aspects of nature. Already, before the partition of the Indic and Iranic nations, the language had been well developed. It had an extensive and flexible grammar and an abundant vocabulary. Its descriptive elements admitted of inflection, and its verbal structure indicated the niceties of action in time and manner. With this vehicle of language on his tongue and the vision of supernal nature above him, the Old Iranian began to elaborate that system of religion and philosophy which has transmitted to the modern world an intellectual interest in the people by whom the system was produced.

Language and subject-matter of the Zend-Avesta.

The language of the Iranic branch of the human family, as preserved in its most ancient books, is known as Zend, and the great Bible of the race, out of which its subsequent religious and literary development proceeded, is called the Zend-Avesta. It is in eight books, which embrace as their subject-matter the same general topics as are presented in the Old Testament. The themes are laws, covenants, prayers, songs, and ceremonials.

The Avesta may be called the Iranian Bible. Its oldest portion is included in

the Gâthâs, or "Songs," many of which are very nearly identical with the hymns of the Indic Veda. This fact would indicate that the Gâthâs had been chanted by the primitive Aryan race before the separation of the Iranic and Indic families. If we look into the spirit of the hymns, we shall find them to be the exuberant expression, the fervent utterances of the primitive worshipers, awe-struck under the mysteries of nature, exclaiming in highly figurative language, and pouring out praise and prayer to the invisible powers of nature. It is as though the primeval singer had turned up his face in adoration to airland and skyland on high, praising the goodness and magnificence of the majesties above, and making petition for blessing and peace.

The hymns of the Avesta are polytheistic. The powers on high are many, not one, and seem to be devoid of personality. These powers were good, not bad—at least in the earliest concepts of the race. The divine attributes of the heavens—deities, if we may call them so—bent auspiciously over the worshiper, and he adored because of the benefits received and expected. The supernal powers were called Ahuras, and were regarded as the life-giving influences of the world. It may be noted here as a fact beyond dispute that dualism, or the recognition of evil powers in the universe set over against the good, is a later concept of the human mind, and does not belong to the really primitive systems of belief. Among no people of the world was dualism more fully developed or the evil powers raised to higher rank than among the Iranians. But the evolution of this system followed the real body of the national worship as expressed in the earlier Gâthâs as the shadow follows the substance. The evil hierarchy was the invention of a later age, and was set over against the beneficent powers of earth and air and sky as if to oppose them and to thwart their benefits to men.

The beneficent Ahuras are celebrated in the Gâthâs.

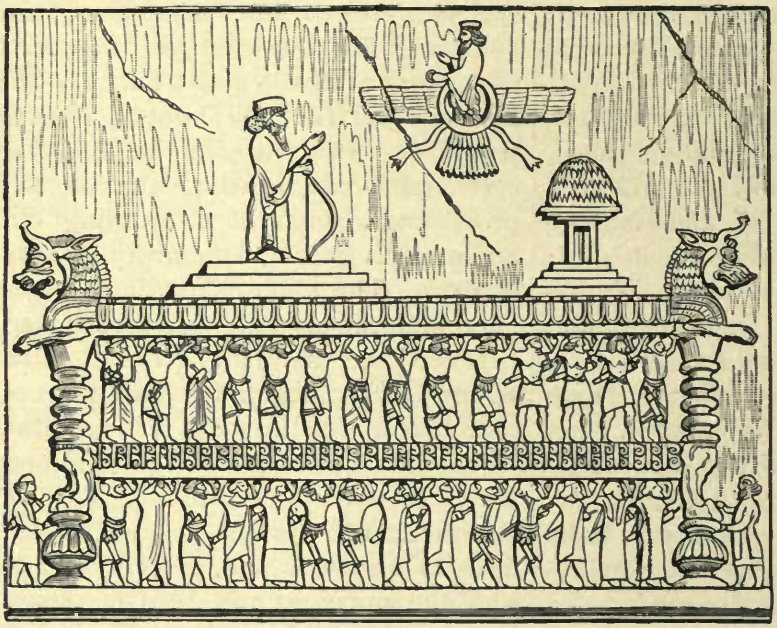
The Gâthâs are gathered from that general division of the Avesta called the Yaçna. The more important part of the sacred writings, however, is known as the Vendidad, which corresponds in general outline with the Pentateuch of the Hebrew Bible. It contains in general an account of the genesis of things and the laws for the ethical government of mankind. It embraces, besides, the ceremonial code, in which the rites and processes necessary for avoiding evil and expiating sin and impurity are prescribed. The whole is presented in the general form of dialogue, or colloquy, between the supreme Ahura, called Ahura-Mazdâo, and his favorite servant, named Zarathustra, who is a prophet. In his Iranic name we recognize at once the Zoroaster of tradition. To him Ahura-Mazdâo reveals his will in answer to questions and prayers; and by him the purposes and laws of the supreme being are revealed to the people of Iran.

Theme and method of the Vendidad.

The Yaçna is of a widely different character. In this are included expressions of praise and adoration peculiar to the Iranian worship. It is the devotional part of the Zoroastrian Bible. As already said, it contains the most ancient element of the whole Avesta. There can be no doubt that the primitive hymns included in this collection were sung by the Indian Aryans and the Iranians while they were still a common people. This aspect of the hymnody of Zoroastrianism raises again the disputed

The Yaçna throws light on disputed ethnic relations.

question as to whether the Iranians went together with the Indic branch of the race into the Punjab, and then, from schism or other cause, parted company with their kinspeople and turned into Iran. This view has been stoutly maintained even by Professor Max Müller. But on the whole it appears more rational, considering the geographical situation and the much greater extent of the migratory movement into India, that the two races divided on the plateau, leaving the Iranic division behind, while the Indic families made their way through the Hindu-Kush or the Himalayas to their destination. However this may be, the common element in the old songs of the Iranians and in the Veda can not be denied or ignored, and the fact points unmistakably to a common religious ceremonial earlier in its origin than the division of the races.



PERSIAN KING WORSHIPING AHURA-MAZDÂO.

The hymns of the Yaçna are devotional. Sometimes the utterance of the worshiper is merely praiseful The attributes of goodness and love and beneficence are ascribed, in exclamatory language, to the powers on high. More frequently the subject-matter of the Gâthâs is in the form of prayer. Of these, the great German Orientalist, Dr. Martin Haug, has made a translation into German, from which a rendering into English has been easily effected. The general integrity of the translation is attested by Müller, who sums up the results as follows: "Many of the passages as translated by him [Dr. Haug] are as clear as daylight, and carry conviction by their very clearness. Others, however, are obscure, hazy, meaningless. We feel that they must have been intended for something else, something more definite and forcible, though we can not tell what to do with the words as they stand. Sense, after all, is the great test of translation. We must feel convinced that there was good sense in these ancient poems, otherwise mankind would not have taken the trouble to preserve them; and if we can not discover good sense in them, it must be either our fault, or the words as we now read them were not the words uttered by the ancient prophets of the world."

Hymns of the Yaçna; Müller's comments.

It can but be of interest to the general reader to examine a few specimens of some of these primitive prayers, representing as they do the most ancient invocations of mankind. The

Specimen translation of the Gâthâs.

following four sections are from the Gâthâs:

1. "This thing will I ask Thee.
Tell Thou it to me aright, Thou living God.
How rose this world?
By what means are the present things supported?
That spirit, the holy Vohu-Mano, O true, wise spirit,
Guardian of the beings who ward off evil,
He is the promoter of life."

2. "This thing will I ask Thee.
Tell Thou it to me aright, Thou living God.
Who was in the beginning the father and creator of truth?
Who made the sun and stars?
Who causes the moon to increase and wane, if not Thou?
This would I know, besides what I know already."

3. "This thing will I ask Thee.
Tell Thou it to me aright, Thou living God.
Who is holding the earth and the skies above it?
Who made the waters and the trees of the field?
Who is in the winds and storms that they so quickly run?
Who is the creator of the good-minded beings, O Thou wise?"

4. "This thing will I ask Thee.
Tell Thou it to me aright, Thou living God.
Will your friend Sraosha [Angel of Light] recite his hymn to my friend Vistâspa, O Thou Wise?
Will he come to us with the good mind,
To perform for us true actions of friendship?"

It has been mentioned that a considerable portion of the Zend-Avesta is in the form of colloquy, or dialogue, in which Zarathustra appeals to Ahura-Mazdâo for wisdom and benefits, and the latter replies with revelations of peace and beneficence. The following specimen from Dr. Haug's translation will sufficiently illustrate the form in which the subject is presented:

Example of Haug's translation of the Zend-Avesta.

"Zarathustra asked Ahura-Mazdâo after the most effectual spell to guard against the influence of evil spirits. He was answered by the supreme spirit that the utterance of the different names of Ahura-Mazdâo protects best from evil. Thereupon Zarathustra begged Ahura-Mazdâo to reveal to him these names. Ahura-Mazdâo then communicated to him twenty of his names, of which the following are examples: The first is Ahmi, meaning 'I am;' the fourth is Asha-Vahista, meaning 'the best purity,' or, perhaps, 'purest and best;' the sixth signifies 'I am wisdom;' the eighth, 'I am knowledge;' the twelfth, Ahura, meaning 'the living one;' the twentieth, 'I-am-who-I-am Mazdâo.'"

After this revelation, Ahura-Mazdâo then continues:

"If you call me at day or at night by these names I shall come to assist and help you; the angel Sraosha will then come, the genii of the waters and the trees." Mazdâo then reveals to his servant another series of names by which evil spirits, bad men, witches, Peris, and other enemies of the human race may be thwarted in their bad designs. Such titles as protector, guardian, spirit, the holy one, the best fire priest, etc., are communicated as the talismanic symbols by which men are to be saved from the influence of the evil powers.

It is believed that at least all the earlier parts of the Avesta proceeded from Zoroaster himself; that he was, in brief, the primitive lawgiver and prophet of the Iranian race. It is evident, moreover, that he held his career while the Indo-Iranic peoples were still a single division of mankind. So that the scheme of religious thought which we have here presented belongs rather to the Old Bactrians than to either of the branches of Eastern Aryans that proceeded therefrom. It will be of interest, therefore, to consider briefly what may be called the Bactrian deities, or those objects of

Relation of Zoroaster to Iranian theology.

adoration which were deemed by the ancient people of the highest order among the supernal powers.

In so far as one supreme being was recognized above the rest, his name was Ahura-Mazdâo. The name Ahura is associated with life and light. As the sun is the supreme object of the visible universe and illuminates the whole, so Ahura-Mazdâo was the highest and brightest. The concept did not rise to the level of monotheism. Mazdâo was the great god of the race, and was regarded as the living creator of all. In general, he was the giver of blessings both temporal and eternal. Such blessings as earthly honor, preferment, and such subjective good as wisdom and intelligence came from this immortal source. Health and virtue, wealth and good fortune were given by Ahura-Mazdâo. These good gifts were withheld from the evil-minded and the wicked. He was a spirit, and approximated in his attributes to the Hebrew Elohim, for which reason there was always a religious affinity between the later Medes and the Hebrews. The careful reader of the Old Testament will note that the two races were in sympathy, even in matters where sympathy was generally impossible.

Place and offices of Ahura-Mazdâo.

FIRE ALTARS OF THE OLD ZOROASTRIANS.
From *Magazine of Art.*

Ahura-Mazdâo had his retinue of ministering angels. They were about him in a dwelling of light, and carried out his will respecting the race of men. One of these hierarchs, greater and brighter than the rest, was called Sraosha. He was preeminently the Angel of the Light, and, since light reveals all things, Sraosha was the revealer of the will of Mazdâo. Primarily, he was merely an attribute of the Most High, one of his shinings forth. Another of these attributes was called Vohu-Mano, meaning "the good mind;" another was Mazda, meaning "the wise;" and the third was Asha, meaning "the true." It was as if the attributes of the primitive Godhead were detached into personalities, under the figure of angels, or messengers.

The retinue of angels; divine attributes become personal.

After Sraosha, the next of the divine beings, as conceived by the primitive Iranian, was Armati, meaning "the earth," who was the same as the Gaia, or Demeter, of the Greeks, and the Ceres of the Romans. The earth was con-

Myth and worship of Armati.

ceived to be a beneficent power. From the mere physical fact of giving food and yielding increase, the mind of the

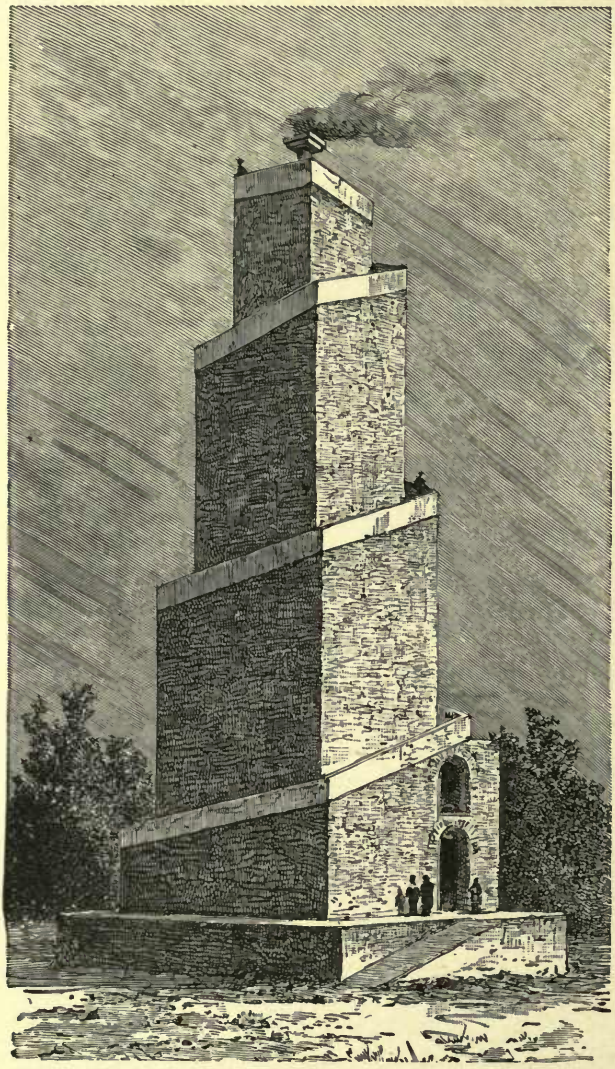
the contest with physical nature man was helped by the invisible spirit of the earth. When the adverse forces of the

PARSEE TEMPLE OF FIRE AT ATECH-GA.—Drawn by M. Moynet.

Old Iranian passed to the general notion of a good being who befriended man and aided him in maintaining life. In

material world gave back under the exertion of man, it was Armati that aided him to get the victory. Armati

gave the seed of the plant and the fruit of the orchard-bough. When the earth was covered with green grass and blossoms, Armati gave the blessing and clothed her habitation with verdure.



FIRE TOWER OF ATECH-GA, AT FIROUZ-ABAD.
Drawn by Taylor, after the restoration by Madame Dieulafoy.

Whatever good thing had its root in the bosom of the earth and yielded its benefit to man, was the gift of this generous, beautiful angel of the world.

The scheme of religious belief and service here outlined was not the most primitive form which the Iranian mind produced. It was a development rather. At the first there was a nature worship, pure and simple. It was by refining upon this natural system of belief that the hierarchy of Mazdâo and his subordinates was developed. In the earlier ages, while the Iranians and the Aryans of India still sojourned together, the simple powers of the natural world were adored and worshiped. These powers came to be regarded as living beings over and above the visible aspects of nature. The first was called Indra, meaning "the storm;" Mithra was "the sunlight;" Armati, as we have seen, was "the earth;" Vayu was "the wind;" Agni, "the fire;" and Soma, "intoxication." These forces or facts of the natural world were adored as the suitable objects of worship, and the deities thus created were common to the Hindus and the Iranians.

The personal deities arise out of nature worship.

In the beginning it was simply a nature worship, under the garb of polytheism. The concepts of the superior beings arose gradually to higher levels. The materialistic element gave place to the spiritual. The separation between the visible aspect and the invisible power became more distinct. At the same time dualism began to appear. It was discerned that the powers of nature are both good and bad. Some are beneficial to men and others disastrous to his interests. The former attracted human affection, adoration, worship. The latter excited human fear, dread, aversion. To the beneficent powers the Iranians gave the name of Ahuras, and to the evil

Separation of the powers and beginning of dualism.

spirits the name of Devas. Such was the genesis of the gods and demons of the primitive Aryan world.

Full of interest to every thoughtful mind are these toilsome processes by which our ancestral race, in the prehistoric ages, gained at length a loftier view of themselves and of the universe in which they were appointed to live. The struggle upward of the Old Iranian mind in its endeavor to reach higher concepts of the natural world and of the powers by which it is governed may be noted with constant admiration. The ascent was spiritward. By degrees the worship of these primitive peoples was lifted from the contemplation of material forms to the adoration of spirit and duty. It was, in its very lowest aspect, an advance from the consideration of matter to the consideration of force. The mind, in its search for truth and stability, ceased to dwell upon the visible form, and passed to the invisible essence. The form was wind, or thunder, or sunlight, or fire, but the essence was truth, or purity, or wisdom, or life. Through all the emblems of this most ancient form of faith it is possible for the modern student to discover a constant tendency to refinement and to the substitution of spirit for material form.

Materialism yields to adoration of spirit.

Philosophically considered, the march of the human mind from matter to spirit passes through a stage of symbolism. It is doubtful whether any stage in the human evolution can be cited in which the concept of spirit has been substituted *at once* for the concept of matter without the interposition of symbolical imagery. There is always a period in the development of mankind, passing out of unconscious into conscious states, more particularly in the progress from a merely material into the ideal life—a period in which emblem and allegory and myth are built into the bridge which spans the chasm between the things that are seen and the things that are eternal.

Symbolism intervenes between form- and spirit-worship.

In the instance before us we may select the myth of the Earth as an illustration of the method by which the mind rises to higher views and fixes itself in contemplation of the supernal powers. Armati, "the Earth," was represented under the metaphor of a *cow*. At first view such an image may appear grotesque. But the most life-giving of all substances with which the primitive man was acquainted—and, forsooth, the modern man has found none better—was drawn from the udder of the cow. Like her was the great earth. Out of it came the streams of life. All the life-producing elements were given from the ground. So Armati was a cow. But the cow was alive. She had a breast, a spirit, a soul. Therefore the earth had a soul. Armati was pervaded by the directing principle of life—a form of belief which reäppeared in after ages, in the *anima mundi* of the Græco-Italic philosophers.

The Earth and the metaphor of the cow.

Now this soul of Armati was called *Geus Urva*, "soul of the cow." And here arises the myth of Geus Urva. Man, inspired and directed by Ahura-Mazdâo, when he came to plant seed in the ground, cut the breast of Armati with a plowshare. Then the Geus Urva, or soul of the cow, cried out in anguish, and appealed to the angels on high to defend Armati against her brutal ravishers. But the mighty angels, understanding the purpose and thought of Ahura-Mazdâo, would not interfere to save Armati from the wound of the harrow and the plowshare. She was left to

Elaboration of the myth of Geus Urva.

suffer and to moan without alleviation of her anguish. But in recompense for her sorrow, she was given the flowers and fruits and waving harvests to hide the wounds in her bosom.

Ahriman and the hierarchy of the Devas.

Mention has already been made of the Devas. There was a hierarchy of the Bad as well as of the Good. Over against Ahura-Mazdâo was placed Ahriman, the Iranian Satan. He was the foe not only of the good powers on high, but also of man. The world was a battlefield between the benevolent and malevolent spirits. Here again we may see the evolution of a concept, proceeding from material to immaterial images. At the first it was the physical world that was divided between the power of light and darkness. In the world of matter dualism is a fact, and perhaps a necessity. While there is day, there is night. While there is sunshine, there is storm. While there is a balm of summer, there is a blast of winter. While there is dew, there are hailstones. While there is blossoming mead, there is blasted harvest. While there is plenty, there is starvation. While there is good, there is bad. While there is life, there is death. The ascent from the opposition and antagonism of material things to the antagonism of things ideal and spiritual is inevitable while the aspects of physical nature are unchanged and the laws of human thought retain their integrity.

Out of these conditions the Old Aryan mind constructed its world of Devas, its hierarchy of malignant spirits. Ahriman was at the head. The rest were graduated in descending orders of malignity, to the small sprites that troubled the dreams of childhood. Ahriman was a demon. He was the Bad Mind of the universe. Indra and Siva, taken from the pantheon of the Brahmans, were his counselors, who presided in the malign parliament whence the black armies of earth and heaven were ordered forth to debase and destroy the children of men.

Intoxication and the worship of Soma.

No tribe of men on the face of the earth has been found without its intoxicant. Neither primitive barbarian nor modern savage has failed to find the substance and the process by which the nervous system may be artificially excited and the mind distraught with the flying fancies of stimulation. Some of the oldest hints of mortal tradition have transmitted the story of drunkenness and the knowledge of the means by which it was produced. Among the Old Iranians the plant of the East, called *Asclepias*, was discovered, the juices of its pith extracted, and turned by fermentation into wine. He who swallowed it was lifted with a sudden delight into the realm of delirium. His heart throbbed and his vision was exalted, while wild landscapes of fairies and phantoms flitted before his eyes. Certainly, said he, this is the gift of a god. It is divine. It is the blessed secret of the immortals, and its name is Soma. Let us drink again and worship Soma. Of a certainty the gods drink and are drunken. Soma is the only good thing which the gods have given us.—Such was the hilarious dream which

> "Brought death into the world, and all our woe
> With loss of Eden."

High morality of the primitive Zoroastrians.

Under the influence of this system of religion the Old Iranians rose to a high level as it respects practical ethics and morality. It may well be doubted whether any other primitive race of men were superior to the Bactrian ancestors of the Aryan peoples as it respects the common virtues of life. The

laws of Ahura-Mazdâo, as revealed by Zarathustra to his people, demanded piety toward the gods and honest endeavor among men. Truth and purity were regarded as the fountains of all good. A life without virtue was worthless. True, the thing called virtue by the best pagans of the ancient world was very different in sense from the narrow and technical meaning of the word in modern times. It was the virtue of strength and courage, the virtue which defended the weak and shielded innocence.

Motive made the foundation of ethics and religion.

According to the Iranian system the actions of men were judged by their motives. Conduct was praised or condemned according to the intent from which it sprang. The simplest pursuits of life were infected with morality. To till the soil was a religious duty. The destruction of weeds and brambles was a thing pleasing to Ahura-Mazdâo. The people of Iran were exhorted to turn from the barbarism of the nomadic life and to seek their subsistence from the bosom of the earth, the breast of that generous Armati, from which came the milk of life to her hungry children. Tillage was, therefore, a duty of religion. Zarathustra enjoined it in his precepts, and piety demanded that men should love and cultivate the earth.

Evolution of the order of the Kavi.

As in the case of all other religions, that of the ancient Iranians soon required a retinue of priests. Some must be set apart to attend especially to the worship of the gods. In this system there were three divisions in the priesthood. First, the Kavi, or Prophets, were supposed, by their discipline and communion with the Ahuras, to be versed not only in the lore of the present, but in the things of the future. This office was a part of that general scheme of benefit which underlay the whole fact of early worship. The fundamental idea was that of *advantage* to men; and secondly, the avoidance of evil. The primitive man worshiped because he conceived it to be of advantage to him to do so. He wished to stand well with the powers of earth and air, to be in alliance with them, to conciliate their favor. Afterwards he wished to avoid, even to propitiate, the evil forces of the world, and to thwart the malevolence of the bad-minded deities.

Imperfection of primitive religious concepts.

One may well be astonished to see how completely all ancient forms of religion are permeated with this narrow consideration of personal advantage. Those high and unselfish considerations that are urged upon the minds of modern peoples by religious teachers were unknown in the primitive world. There was, indeed, in the mind of antiquity no perception or sense to which such exhortations and inducements would have appealed at all. The old tribes, still struggling with the rank conditions of unsubdued environment, thought only of advantage, how they might for the present be benefited, how gain might be had and misfortune avoided.

Even the Semites had low notions of worship and duty.

Even among the Semitic nations the same low concept of the relation of man to the power on high existed. As late as the time of the composition of the Pentateuch the Hebrew race had risen no higher than this earthly view of the profitableness of religion. In the twenty-eighth chapter of Deuteronomy the summary of the whole argument in favor of the expediency and rightfulness of religious service to Jehovah Elohim is set forth in an extended catalogue of benefits to be gained and evils to be

avoided, not a single one of which rises above the level of mere temporal advantages on the one hand or physical afflictions on the other. This is all the more surprising when we reflect on the high concept which the Hebrew race had of the nature and attributes of Deity.

added the natural curiosity of the human race to know mystery and to see the invisible. The Kavi were supposed to be in communion, at least when exercising their priestly office, with the Ahuras, especially with Mazdâo and Sraosha, and from such intercourse with the powers

GUEBER CEREMONIES AT TEMPLE OF ATECH-GA, NEAR BAKAN.—Drawn by M. Moynet.

This notion of advantage underlay the prophetical office of the Iranian Kavi. It was beneficial to foreknow what was to come. The Iranic people, with such revelation of the hereafter, might better adjust themselves to the conditions of the physical world, and thereby more easily gain its benefits and avoid its evils. To this bottom motive in the institution of prophecy must be

Fundamental ideas of the office of Kavi.

on high they gathered their revelations for men.

The second class of Iranian priests were known as Karopani; that is, "Sacrificers." The notion of contributing something to the gods from the abundance of the earth is one of the most primitive of the religious concepts of mankind. It implies mutual advantage. Men, hoping to receive favors

Sacrifice intended to supply the deities with food and raiment.

from the powers of earth and heaven, give something of their own goods in return. The fruits of the field are brought and laid upon the altar. Favorite animals are led forth and presented to the deities.

There are two correlations here which may be noticed with interest. First, that the deities—in this case, the Ahuras—are supposed to require *for food* the same things that are agreeable to the appetites and wants of men. Very rarely do the things sacrificed represent any other element than that of food value. Among some primitive peoples articles of clothing, the hunter's gear and weaponry, were given in sacrifice. But generally there was a strict conformity of the things offered to the articles of food most desired by the sacrificers. With the growth of æsthetic tastes flowers were added, but generally those articles of the vegetable and animal kingdom which were used by the people to sustain life were given as an offering.

Among the Old Iranians, such articles were fruits and grains and certain animals, particularly the horse. The latter was a notable departure from the usual order. The horse was sacrificed not as an article of food, but as the most valuable of the possessions of the worshiper. Without the horse his journey from place to place could not be made. Without him the hunt would be reduced to a mere struggle of man with the wild beast, and without him war would be impossible. So the horse must be given to the Ahuras as the most acceptable gift.

The things sacrificed; gift of the horse.

The second notion above referred to is that of the *method* of transferring the gifts from the visible hands of the givers to the invisible hands of the Ahuras. Fire has been a possession of all the races of men. Its general office is to make the visible forms of things invisible by combustion. This transforming force was therefore employed in all the sacrifices of the primitive world. The thing given was committed to the flames, and disappeared. By this process of divine commerce the fruit of the earth or the slaughtered animal was transferred to the immortals. As a rule, however, *not all* of the thing sacrificed was committed to the flames. The shrewd wit of the primitive worshiper still dallied with the idea of advantage to himself. A part of the offering was reserved for the priest. As for him, he could readily make a tradition that by eating of the sacrificial offering he sat at a common table with the gods. This ingenious casuistry would be accepted as a verity, and the giver of the sacrifice would be satisfied.

Fire employed as the agent of transformation.

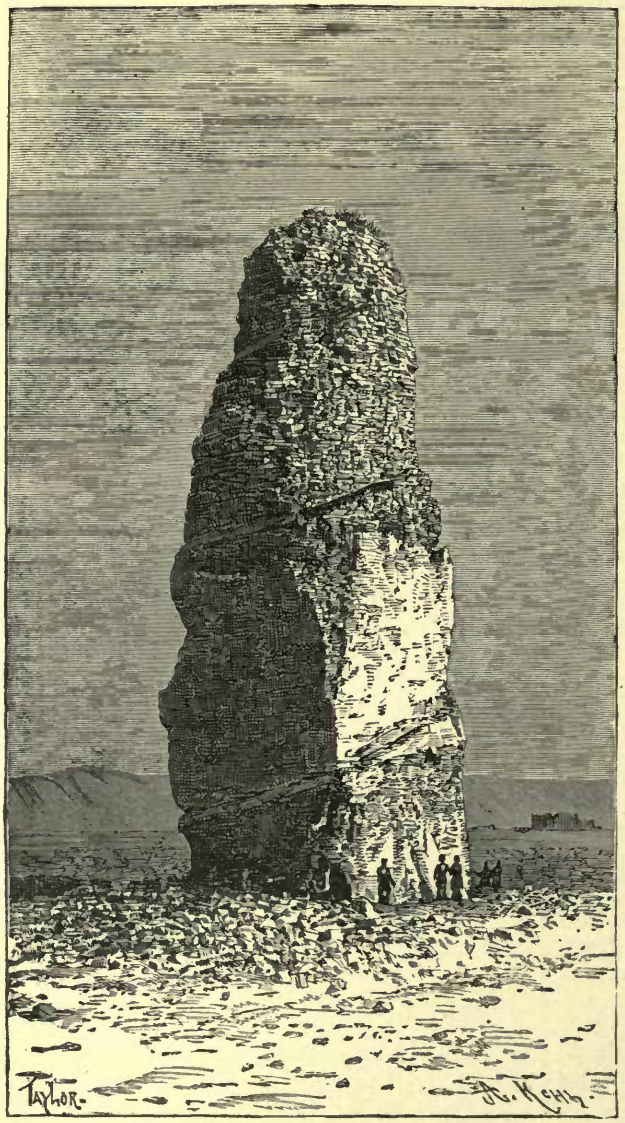
The third group of Iranian priests were known as the Ricikhs, or the "Sages." They were the early philosophers of the race. In the religious evolution the Iranian mind conceived it wise to draw along with the development of ceremony the incipient learning of the age. A class of hierarchs, known as the Ricikhs, thus arose, as natural philosophers, interpreters of earth and air and heaven, not seers in the prophetical sense, for that was the office of the Kavi, but wise men in the interpretation of all things secular and material—teachers of the commonplace and natural.

The primitive philosophers of the Iranian race.

Nature worshipers in the primitive ages are little disposed to building temples. It is only in subsequent stages of development that a system of religion, founded on natural concepts, requires

the erection of houses for the deities. In the beginning all worship is conducted in the open spaces, under the arch of heaven. Among the Old Iranians, the hilltops were chosen as the most suitable places on which to build their altars and offer their sacrifices. It was on these high places, from which a view of a great horizon could be obtained, where sun and earth and air were revealed in all their grandeur and beauty, that the earliest priests of the Aryan race stood up and chanted their Gâthâs and offered prayer. It was a long time before the temple-building epoch arrived in the history of the two branches of the East Aryan race. It is perhaps impossible for the modern inquirer to transport himself into the consciousness of this ancient people, and to feel *the reasons* which were sufficient for performing the services of religion in the open air and which forbade the localization of worship in a temple. Even to comparatively late epochs in the history of this race the palace of the king always outshone the temple of the gods. To the present day the hilltops back of Bombay smoke with the fires of the Parsees, with no roof above save the Indian sky.

East Aryans preferred the open air for worship.



PRESENT STATE OF FIRE-TOWERS AT ATECH-GA.
Drawn by Taylor, after a photograph by Madame Dieulafoy.

Nature worship did not inculcate immortality. The doctrine of the continuous existence of the soul after death rose slowly and through many tortuous processes of thought from the primitive naturalism of the Iranian race. It is surprising to view the indifference of all the Aryan peoples of antiquity to the question of a life after death. When the powers of the natural world had been separated from its physical aspects and elevated into the character of Ahuras, they were regarded as immortal. But even this aspect of the old natural theology was not dwelt upon before the classical ages. It came at length, however, to be perceived that the gods, in order to be of permanent benefit to their worshipers, must be immortal. Otherwise, death

Notion of immortality of later date.

might intervene and all advantages cease forever.

From the immortality of the gods, it was but a step to the concept of the immortality of the soul. In the later development of Zoroastrianism such belief became prevalent, and the teachings of the Magi were largely based upon the belief in an existence of the souls of men after death. But in the earlier ages duty and obligation were enforced by the Kavi and the Sages of Mazdâo on the simple grounds of benefits to be gained and evils to be averted. The concept of an eternal existence had not entered in; the horizon of religion, as it was believed and practiced by the Old Iranians, was coïncident with the horizon of life, and the religious ceremonial was all prepared and performed with the expectation of earthly benefits.

At first worship was moved by hope of advantage.

In the attempt to gather the outlines of the prehistoric life of a people, and to depict the same as one complete image to be looked upon by living races of men, the writer is many times embarrassed in selecting those features which are most likely to make a distinct and lasting image. In the present case we have dwelt at some length upon that Old Iranian faith which had Ahura-Mazdâo for its supreme spirit and the Zoroastrian Bible for its apocalypse. We have done so for the reason that this system of belief and practice was a fundamental element, if not indeed the very life, of Iranic development and nationality. The rising institutions of the race took form and fashion from the religious system of Zarathustra. One of the strongest forces by which the impulses of the nomadic life were held back and finally bound down to the pastoral and agricultural career, by which the settled tribes gradually became predominant over the hunters, and by which institutional forms took the place of mere tribal chaos, was the unity of religious beliefs and practices common not only to the Iranians themselves, but also to their kinsmen in India.

Iranian religion foreran national development.

CHAPTER XXXIV.—SEX AND MARRIAGE AMONG THE ARYANS.

IT will now be of interest to say something of the relations of man and woman among the forefathers of the Indo-European races. The perpetuity and, indeed, the very existence of the human family depends upon the fact of sex in the species. The complete mankind is divided into two parts, the man and the woman. By a beautiful coördination, and perhaps what may be called a natural division of labor, the procreation and the bearing of offspring are divided as might be a piece of work in economics. The duty of perpetuating the race is separated into parts and given to two instead of to one. In this respect mankind share in the general analogies of nature. Nearly all animals and plants reproduce by sex. In some cases the whole procreative act is accomplished in a single individual of the species, but, as a rule, it is divided between two

Importance of sex and sex union in race history.

The laws by which the two coöperate in this vital effort to maintain the species of which they are themselves the units are all-important, and must ever constitute one of the most interesting studies to which the reflective mind may be devoted.

IRANIAN FAMILY TYPE.
Drawn by Tofani, after a photograph by Madame Dieulafoy.

In the human family four general schemes of propagation have been employed by various tribes of men while still under the dominion of the unconscious forces peculiar to the childhood of the race. It is almost certain that no one of these has been used by all as the first, or primal, method of maintaining human existence. The facts seem to warrant the belief that some of the primitive races have instinctively employed one plan for the union of the sexes, and others another plan. The four methods referred to differ among themselves materially. They are unlike considered as plans of procreation, and are diverse in the social results to which they lead.

Four methods of sexual union among races.

The first is the scheme of sexual union in which men and women are miscellaneously joined in the procreation of the race. It implies little more than the instinctive and temporary union of the male and the female in the other races of animals. It signifies that after this temporary relation, resultant in the birth of a new member of the species, the relation shall cease as it respects the parents, and that each of them shall thereafter enter into new unions with other members of the species, and so on

Communal system of marriage; its impermanence.

throughout the productive period of life.

Impermanence is the feature of such a connection of the sexes. It extends even to uncertainty as to the male parentage of all offspring. It makes the woman the mother of many children by different men, and the man the father of many children by different women. The system is known as communal marriage, and it may well be regarded as the most barbarous, if not the most primitive, of all the forms of procreative union between the sexes.

Nature of the polygamous scheme of union.

The second scheme is that in which one man selects two or more women as his wives and by them multiplies his kind. The relation once established is supposed to be permanent during the procreative period of life. This makes the man the central fact in the propagation of the race. From him the lines of life diverge through several members of the opposite sex, and are spread wider and wider as the process goes on, to the second and third generation, until his blood is almost infinitely diffused. After some generations vast multitudes would trace backward, through different mothers, their descent from a common father. To this scheme of multiple marriage is given the name of polygamy—a word which the discerning tongue of the Greeks has contributed to the vocabulary of the world.

Antecedents and results of polyandrous marriage.

The third plan of union between the sexes is like the last, except that the position of the parties is reversed—exactly reversed as to parentage, but not as to results in offspring. In this third scheme several men are married to one woman. She, and not the man, becomes the central fact in whom the lines of life converge. In all other schemes the lines are divergent toward posterity, but in this—such is the nature of the union—the course of all the forces of procreation is toward the woman. As to the offspring, the mother, as in all cases, is known; but the paternity is undiscoverable. Each child has a single unit for its mother and a multiple factor for its father. In some tribes all the brothers born of a single mother are married in common to one woman. But when it is said that all the *brothers* are so wedded to one, it must be remembered that the brothers in question have a multiple paternity; that is, they are not brothers in the sense that men are brothers in the monogamic relation, or even in polygamy. In other tribes not only the sons of a single mother are wedded to one woman as her husbands, but all of the members of the tribe are in like relation with her. Among many of the North American aboriginal nations the woman is *the wife of the tribe*. This system is called polyandry, a term which is self-definitive of the relation.

Monogamy determines both lines of parentage.

The fourth plan of procreative union is called monogamy. It is the joining of one man to one woman and of her to him. The relation thus established is distinct from any of the three preceding. It is especially different as it relates to offspring. It signifies an ascertained parentage in both maternity and paternity. It signifies that all the children born of one woman have a single father, and that all the children born of one father have a common mother. The relation is so easily apprehensible that it need not be described, either in itself or its results.

It should be remarked that the sexual usage in different nations adopting different schemes of procreative relationship is particularly tenacious, and is generally

maintained with scrupulous exactitude by the sentiment of the given people.

All races have and maintain a sexual code.

Monogamy is by no means regarded as more essential to the welfare of the race by those peoples who practice it than are the other schemes of union by the respective races among whom they prevail. There has never been found a tribe of savages so low in the human scale as not to have a certain sexual code, any departure from which by the members of the tribe would be regarded not only as scandalous, but as destructive of the welfare and happiness of all.

We can not pass from this analytic view of the nature and methods employed by different peoples in perpetuating the race without noticing the bearings of the subject on certain controverted questions. The principal of these is the historical priority of the several plans of marriage enumerated above. The problem is not so important in itself as in its relations to another question. It is easy to perceive that if monogamy be the first great method of mankind, then the family, which is the second unit in ethnic development, precedes the gens, the gens the tribe, and the tribe the race, in the order delineated in a former chapter. But, on the other hand, if the system of polyandry should be the primitive method of union, then, undoubtedly, the tribe would be the first in the order of development, the gens second, and the family the last stage in the human evolution.

OLDEST TYPE OF THE MARRIED WOMAN—A CHALDÆAN.
Drawn by Mlle. de Lancelot, after a sketch by Madame Dieulafoy.

Historical priority of marriage systems considered.

If the ethnographer of to-day is com-

pelled, with the data before him, to decide this important question, he will be obliged, in view of all the facts, to express the belief that some of the primitive races of mankind have adopted one of these schemes, and others another. This is to say that in certain families of men the monogamic principle employed from the beginning has led from the family to the gens, from the gens to the tribe, and from the tribe to the race, while in other branches and under different conditions instinctive ethnic preferences have led to the adoption of communal marriage, or more particularly to polyandry, by which the general course of the race development has been exactly reversed, beginning with the tribe and passing by way of the gens to the final establishment of the family.

Some tribes adopt one method and some another.

It has been the custom to say that monogamy originated, or was at least given its first authoritative expression, among the Romans. It can not be denied that from a very early age the monogamic relation was formally recognized by the Latin race as the one valid law of sexual union. It is equally certain that the extension of Roman power over all the countries around the Mediterranean and far into the East compelled the acceptance of this feature of social organization. Monogamy became thus intimately associated with the bottom principles of Christianity, and after the decline of the empire the law of single marriage, the union of one man and one woman for life, was carried throughout the world, wherever that system of religious belief found a footing. But it is doubtful if such is—if such was—the actual beginning and establishment of the monogamic relation among mankind.

Alleged beginning of monogamy among the Romans.

The Greeks were monogamists. In general, the Oriental nations were polygamists, but in the West the opposite principle prevailed. Among the Gothic races, also, as far as custom had been formulated into law, it appears that the principle of single marriage was universally recognized. The primitive institutions of the Celtic tribes in Western Europe have not been well ascertained, but we have reason to believe that among them also the law was monogamic. The Greeks did not elevate woman to a high rank or make her, in any sense, the social equal of man, but they were not polygamists. Neither were the primitive Aryans of India. We have already seen that the Old Aryan Housefolk of the Indian valleys were organized into families on the monogamic basis. The system of naming which they used to express the family relations precludes all idea of communal or polygamic practices among them.

Other Indo-Europeans practiced single marriage.

The same is true in Iran. As far back toward the bottom of the Aryan nidus as we are able to penetrate the relation was one man for one woman and one woman for one man. While men are in a tribal state, such a principle can never be carried into full effect. All modern nations have had cause to appreciate the extreme difficulty of maintaining in its integrity the system of monogamy as against the natural license and vagrant instincts of the race. If the system has thus had to contend with many diverse forces in the higher forms of society, how much more may we expect it to have had an imperfect form among prehistoric nations!

Difficulty of maintaining monogamy against license.

It is true, then, that the Romans were the great authoritative promoters of single marriage in the ancient world, and

that the Christian religion was at least the vehicle of the diffusion of that plan of union among the nations of the earth. But it may be safely asserted that the system *is peculiar to the Aryan race*. For some reason it accords with the instinctive sentiments of nearly all people of Indo-European descent. The attempt to introduce and to maintain some other law of sexual union among the Indo-European races has been always combated not only by the statutory principles and positive laws prevalent among them, but also by the bottom instincts of the race.

Single marriage peculiar to the Aryan races.

It remains, therefore, to look briefly at the *reasons* that may be assigned for the preference of one system of marriage over another. What are the circumstances, the facts, which induced some of the primitive tribes of mankind to adopt monogamy, others polygamy, and still others polyandry, or even communal marriage? It might well be thought that human beings in the unconscious state, placed under like conditions and confronted with a problem so natural and inevitable as that of procreation, would all alike solve the question in a given way, and adopt a common ethnic code governing the manner and even the details of this great central fact in the perpetuation of the race. Such, however, we shall not find to have been the natural and necessary order in the evolution of human society.

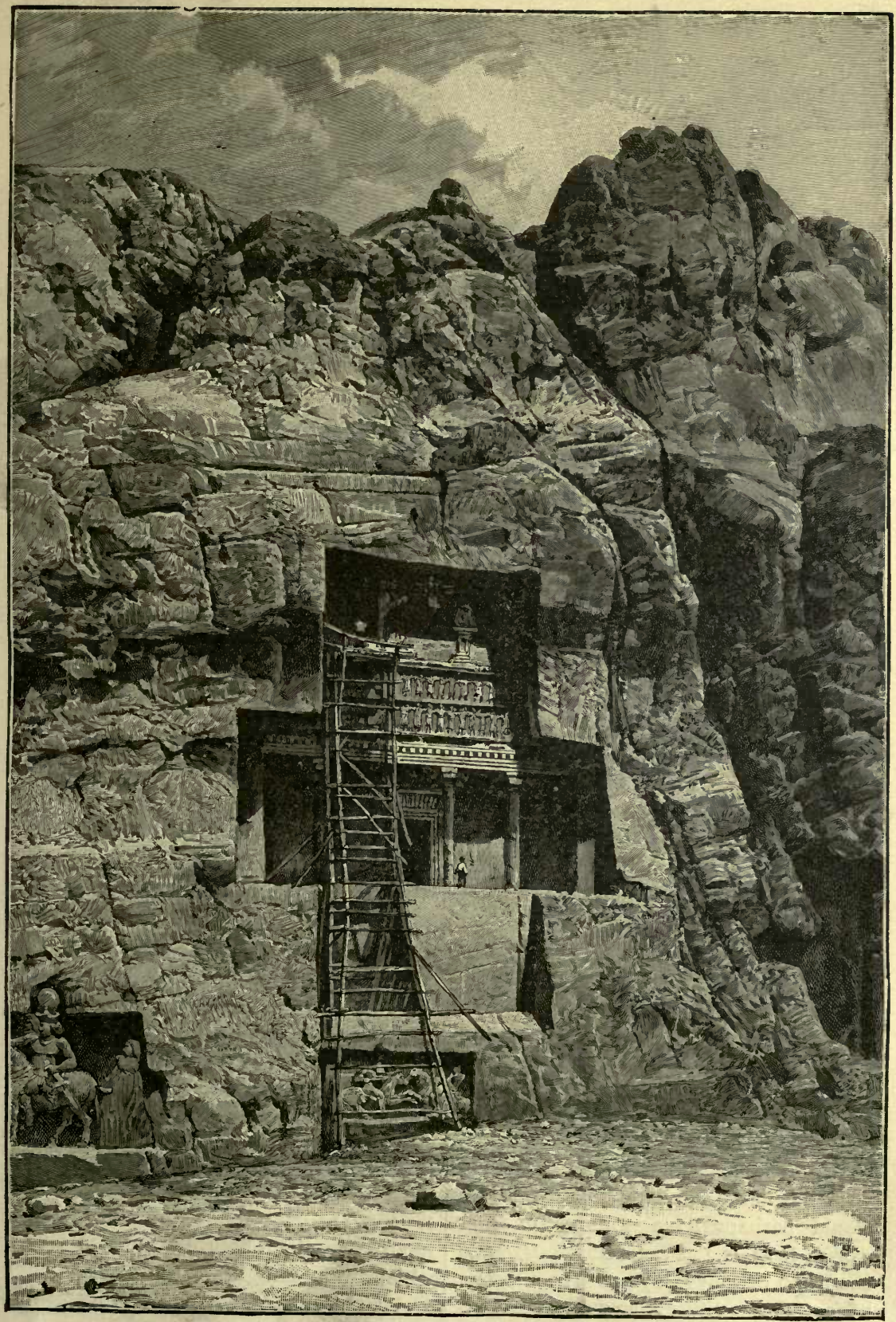
Facts tending to determine marriage systems considered.

A close study of the conditions under which the races of men were originally placed will show great diversity in their situations. It may be perceived that the motives which, unconsciously to themselves, played upon the first men and women in different parts of the earth were very diverse and even antagonistic. From the beginning the unconquerable instinct of the mother was for the preservation of her child. The instinct of the father also *tended* to its preservation, but not with so great force as on the mother's side. Under certain conditions the sustenance of the child was so easy as to be almost natural. Under other circumstances, it was a work of difficulty and labor. In the latter case, a repugnance to offspring would arise among primitive people, and would presently become so strong as to suggest destruction. As soon as barbarian fathers should adopt this method of lessening the number of those whom they must support and with whom their households were encumbered, a natural selection would lead to the destruction of *the girls* and to the preservation of the boys. By this means the tribal society would soon have a preponderance of males and a paucity of females. This is a monogamic condition. Such a state is the antecedent of single marriage.

Conditions antecedent to the monogamic method.

Under such circumstances several men would compete for a single woman. The strongest would obtain her, partly by his strength and partly by her preference for him as the best. He who obtained could generally defend. The man thus married would become a party of the first part, and those whom he had surpassed in competition a party of the second part, both obliged to the maintenance of the union thus established. Each of the party of the second part would hope in turn to obtain some other woman as his own, and thus to become a party of the first part, in a compact to which *his* competitors were a party of the second part. Here are the foundations of a natural league on the part of all to support and maintain monogamy.

Nature of the forces whereby monogamy is confirmed.



FORM OF ROYAL TOMB IN POLYGAMOUS COUNTRY.—Drawn by Taylor, from a photograph.

Under other conditions a wholly different state of circumstances might arise. In a warm and fertile island or in a fecund Oriental valley—where nature brings forth in abundance all things soever which are desired by man, where her resources seem exhaustless and the eater has but to lift his hand to the bending bough to gather what fruits he will, where the genial atmosphere and the equability of the seasons requires no clothing and suggests no permanent shelter, where even the infant, before it leaves its mother's breast, begins to gather from its environment all manner of natural foods adapted to its wants—the law of life and of the maintenance of life is almost reversed from what it is amid the hardships incident to adverse regions. In such circumstances the maintenance of offspring, however numerous, could not be regarded as a task. Neither father nor mother could be much embarrassed even by a multitude. The suggestion of reducing an overplus by destroying it would not arise. The unrestrained impulses and the unlimited results of human instinct would take their natural course, and no one would feel the burden. In the choice of their sexual mates men would not be limited to one by a confederation against him of the parties of the second part. The females of the tribe would be at least equal in number to the males. The stronger and more vigorous men would take two women or more to wife, and there would be no league against them by a disfranchised minority. The strong man would thus originate two, three, or many branches to his family. The weak man would perhaps have none. In other words, here is the antecedent state and condition of polygamy; and, as a matter of fact, the institution so called has generally prevailed under the circumstances above enumerated.

Certain other conditions tend to establish polygamy.

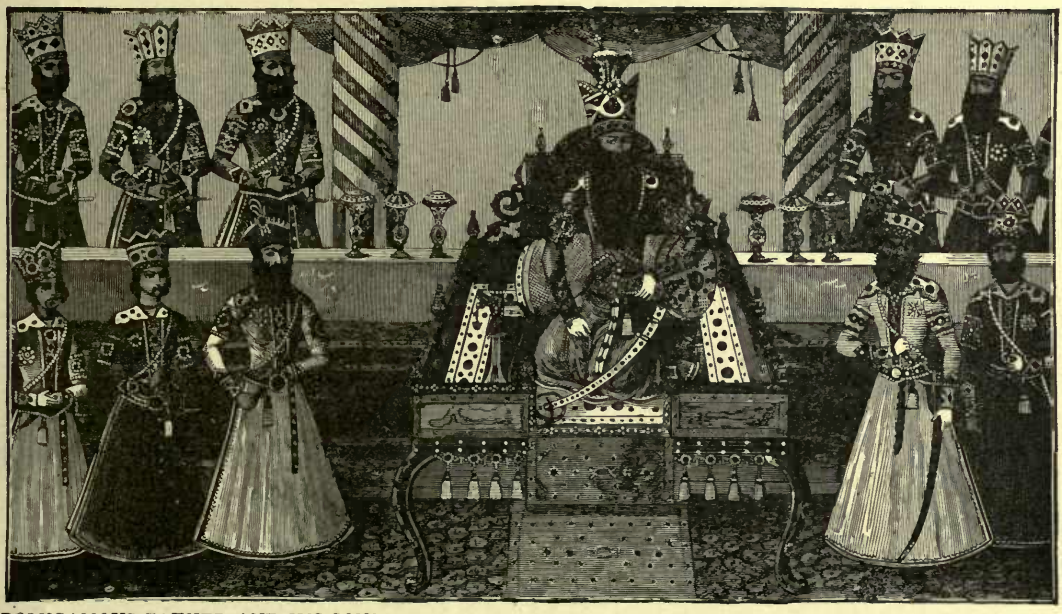
As to communal marriage, it appears to be merely the sexual chaos of tribes in whom the human sentiments peculiar to this relation have not yet appeared. It would be difficult to point out any particular in which this system differs from the method of union instinctively chosen by the lower animals. The existence of such a method, if method it may be called, implies the existence of tribes of men between whom and the animals there is only a small diversity of physical form and the possession by the one of larger capacities than by the other. It is a state of nature, pure and simple, and has only been found among peoples whose advance from absolute savagery has not proceeded so far as the institution of any definite social forms. We shall hereafter have occasion to speak further of this state in connection with some of the tribes by whom simple communal unions are the only custom and law of marriage.

Communal marriage the result of sexual chaos.

The natural antecedents of polyandry are hard to trace. This form of union has prevailed in different parts of the earth to an extent not understood or appreciated until recent investigations have brought the matter to light. The majority of all the Indian races of North America employed polyandry as the bottom fact in their social structure. The same method of marriage prevails largely in the Polynesian islands and in other quarters of the globe populated by races of Mongoloid descent. Some suggestions may be offered, however, relative to the obscure origin of this, which to the enlightened understanding seems the most repulsive of all forms of

Paucity of females must have preceded polyandry.

union between the sexes. In the first place, there must have been antecedent to the origin of the custom a paucity of females, either from some perversion of the laws of birth, or from the destruction of female infants. If the latter, it may have occurred either by the will of the parents or by natural causes. Sufficient data are not accessible to indicate which of these circumstances has led among certain of the primitive tribes to the excess of males. Such an excess being granted, we can conceive that several males would compete for the possession of one woman, and to this extent the antecedent condition is identical with that among monogamous barbarians.



POLYGAMOUS FATHER AND HIS SONS.—Fattally Chah.—Drawn by H. Chapuis, after a photograph by Madame Dieulafoy.

But from this point the analogy breaks. For in polyandry, instead of the strongest competitor taking and keeping the prize to the exclusion of the rest, the rivals make a league to have the woman in common. The facts show that the rivals are in the first place the brothers born of some common mother. Among Aryan nations, however, the rivalry of brothers is not less intense, even deadly, than between strangers. But for some reason among the polyandrous tribes, the rivalry of the males has not taken the same course. Perhaps this may be accounted for on the ground of the smallness of the divisions into which the Polynesians and the American Indian tribes have generally been parted. Where a given totem has embraced but a few wigwams, a few warriors, and still fewer women, it might have been disadvantageous for the warriors to go into deadly rivalry over the question of marriage. It may have been found among tribes thus weak that it was advantageous to husband the meager resources of force and tribal vitality by assigning two or three warriors to a given woman in the bond of a friendly husbandry. Whatever truth there may be in these conjectures, which are put forth as tentative explanations of the institution in question, polyandry exists as a large fact in the primitive history of mankind. It has

Smallness of tribal division favors polyandrous system.

doubtless been practiced by a greater number of aboriginal tribes and races than has polygamy or communal marriage itself.

A question of great importance relating to vital statistics and to a still deeper law of biology has been raised with respect to the tendency of these several forms of marriage on the proportion of male and female births under each. It is conceded that generally through the kingdom of life the ratio is equally maintained, under equal conditions, between the male and female members of a race. There can be little doubt that mankind in the monogamic relation obeys the general law, and is perpetuated by nearly equal increments of the two sexes. The same may be said of communal marriages. Among the tribes where this usage holds, infants are born in equal proportions in either sex. The great question is whether in the two intermediate systems of polygamy and polyandry the opposing methods of union tend to perpetuate themselves by producing in one an excess of female births and in the other an excess of males.

Bearing of marriage systems on proportion of the sexes.

That such is the result has been stoutly maintained. It has been averred, and many facts have been cited in substantiation of the principle, that in polygamy a tendency to an excess of females is at once discoverable. This is to say that nature provides for the continuance of the system by giving, as the fruit of the multiple marriages of one man, a considerable preponderance of female children. It is also alleged that in polyandry the system perpetuates itself by the production of an excess of males. But both of these principles have been strongly controverted, and facts have been adduced which would seem in given cases to establish the law of equal birth under both the systems mentioned. There are some physiological reasons for believing that the first of the two arguments is better maintained, and, on the whole, the true one. But the question is still obscured with much doubt, and must be remanded to future investigation for a final decision.

Do polygamy and polyandry perpetuate themselves?

This digressive study relative to what may be called the primary or bottom organization of society among the various tribes and races of mankind has been brought in in this connection once for all, that the reader, at the beginning of the delineation of tribal and national life may have, as in a chart before him, the diverse plans or methods of sexual union, and the consequent perpetuation of the human family in the various quarters of the globe. The Old Iranians were monogamists, with only such departures from the law which instinct and custom had provided as are incident to the general lawlessness of mankind.

With this monogamic principle the religious elements which were developed by Zarathustra and the Kavi entered into combination, and, as the nomadic life gave place to a settled state, the old provincial nationality of the Medes may be said to have begun. We are here examining the very roots of human history. The opinion is confidently advanced that there was something in the instinct and something in the environment of the primitive Aryan race, in its old Bactrian nidus, before the Veda was the Veda, before the Avesta was the Avesta, which impelled to the union of man and woman in the procreative relationship on the monogamic, or single marriage, principle. And from this remote period, below the daydawn of hu-

Monogamy reinforced by the Iranian prophets.

man history, that principle has remained instinctive in the race and in all its branches. Doubtless, in some particular instances the old bottom law of Aryan thought and preference on this subject has been subverted by environment and association, and has been supplanted by one of the other principles of sexual relationship, but the exceptions will be found, on the whole, rather to verify and illustrate than to abrogate the general law.

CHAPTER XXXV.—HISTORICAL DEVELOPMENT OF THE IRANIANS.

THUS far in the course of the present work little attention has been paid to chronology. No effort has been made to fix, with even approximate certainty, the time relations of events. This course has been fully justified by the fact that the events referred to have been either absolutely prehistoric, or else located along the farthest horizon of formal history. Nothing certain as to dates can be offered for such shadowy parts of the annals of the human race. Chronology is one of the special devices of history. It is said to be one of the historical eyes through which all things are seen. Perhaps we are now, however, arrived at a point when something may well be said as to the approximate time when the Old Iranians merged into the dim morning light of antiquity.

Question of dates in Old Iranian history.

On this subject we are fortunately in possession of some distinct points of observation. It is conceded that the Medes were the oldest historical expression for the ancient Iranian race. Concerning the antiquity of the Medes, we are able to draw at least a vague outline. According to Polyhistor, following and repeating Berosus, Zarathustra, or Zoroaster, was the first of a dynasty of eight Median kings ruling in Chaldæa in the very earliest ages of history. Indeed, with the exception of the Egyptian annals, this is the farthest point of light which the historian is now able to touch, as he looks into the mist-covered dawn of human affairs. The Chaldæan dynasty referred to was the second which had ruled in the old empire at the mouth of the two Mesopotamian rivers. It was composed of eight kings, Zoroaster being the first; and there are good reasons for fixing the limits of this dynasty between the years 2286 and 2052 B. C. At the close of this period it appears that the foreign, that is the Median, domination in Chaldæa was broken and the throne regained by native princes. It has been customary to make the date of Zoroaster about coïncident with that of Abraham, but the current chronology would hardly admit of this construction. It may be accepted as approximately correct that the founder of the Old Iranian faith flourished at about the time indicated above.

Probable place and epoch of Zoroaster.

One of the principal errors into which the occasional student is likely to fall relative to the relations of ancient events is to fix them, as it were, on a flat surface, without allowing for perspective. In the present case, it must be remem-

Historical students do not sufficiently consider perspective.

PLATEAU OF IRAN.—Threshing Wheat.—Drawn by Laurent Desrousseaux.

bered that there was necessarily a long Iranian history *before* the time of Zoroaster. There was already an organized people, developed from the tribal state and sufficiently high in the scale of unity and self-consciousness to receive the revelations and accept the ideas which he brought. The migratory period of the Old Aryan departure, of the joint and common progress of the Indic and Iranic races, of their gradual separation into two distinct families, and the development of institutional forms in each, all preceded by ages of indeterminate, or at least undetermined, duration the apparition of the great teacher and prophet of Ahura-Mazdâo.

It must be borne in mind that the Old Iranians, of whom we are here speaking, are a prehistoric people. That is to say that their life and history have been developed by what may be called historical parallax. The data in possession of the ethnographer and historian are sufficient to construct an accurate outline for the career of many peoples whose actual annals nowhere exist in the literature or among the monuments of mankind. Nor is there any uncertainty about the process of the results which are reached by this method of investigation. The astronomer, acquainted with the laws of physics and with his calculus before him, feels into the depths of invisible space and grasps the unseen planet, determining its mass and velocity with an exactitude which in a less cultivated age would be set down as miraculous. To

OLD MEDIAN TYPE—CYRUS THE GREAT.
Drawn by Madame Dieulafoy after the sculpture.

Possibility of developing historical outlines by parallax

the sight of the well-instructed ethnologist, or even well-versed historian, the outline of prehistoric nations, their career and character, are as plainly discernible as are the unseen worlds to the vision of the astronomer.

TYPE OF ANCIENT IRANIAN KING—DARIUS AND THE LION. Heliogravure, after a photograph from the sculptures, by Madame Dieulafoy.

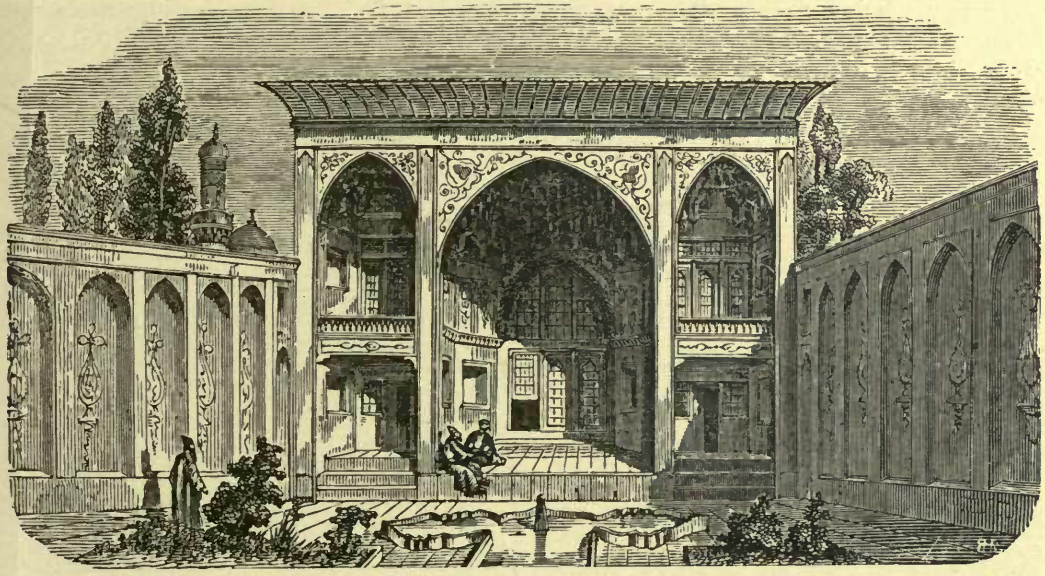
We may, first of all, discover the Old Iranian in the person of the Mede. The Median nation is the earliest apparition into the actual foreground of the ancient Bactrian Aryans whom the natural eye has ever seen. For how long a period the Iranian race continued to expand and become fixed in institutional aspects before the actual historical emergence of the nation it is impossible to determine. So far as existing records are concerned, our first acquaintance with this people may be set at the latter half of the ninth century before our era. It was at this time, in the reign of Shalmaneser II of Assyria, that an expedition was carried out across the Zagros into Media, where the Assyrian army succeeded in taking several cities, slaying the inhabitants, and carrying off the spoils of victory. From this time forth a formal history of the Median power, until its amalgamation or absorption in the rising dominion of Persia, may be authentically constructed. It is not here that we have to do with historical narrative proper. There is a difference to be observed between an account of the social, civil, and military movements of nations, and an ethnic history of mankind. It is here essayed to develop the latter, and we have only to deal with the race aspects of the questions arising before us.

The Old Medes the first forms of the Iranian evolutions.

Monarchy came with tribal consolidation in Iran. It is fairly well established that the first authentic ruler of the kingdom was Phraortes, who reigned from about 660 to 633 B. C. Long before this time are seen the shadows of the kings walking. Herodotus accepted some of them as real. Ctesias extended the list backwards, arranging a fictitious dynasty to the first quarter of the ninth century B. C. Names and dates are given. We

Rise and progress of Iranian monarchy.

are introduced to Arbaces, Maudaces, Sosarmus, Artycas, Arbianes, Artæus, and finally Deïoces, which last stands in the dawn of the reality. The rest are fabulous, and are to be ranked with the mythical kings of Greece and Rome. From Phraortes, however, monarchy as an institution may be regarded as established among the Old Iranians. The great reign of Cyaxares followed, and the civil power was consolidated. Then followed the reign of Astyages, 593–558 B. C., at which latter date the relations



COURT OF PERSIAN MONARCH (ROYAL PALACE OF ISPAHAN).

previously existing between Media and Persia were totally reversed by the genius and warlike daring of the young prince Cyrus, who subverted the throne of his grandfather Astyages, and removed the seat of government to his own capital in Persia.

But the race was one, not two. Medo-Persian stock was not materially different in its two branches, the chief diversity being in the date of development. The Persian sprang last and grew highest. The term Medo-Persian must be understood to express an ethnic

Order of the Medo-Persian development.

fact much nearer to unity of character than the term Græco-Italic, applied to the two branches of the Southern Aryans in Europe. In Iran the language, manners, customs, and growth of society, civil and political, the religious belief of the people, and, indeed, all the elements of development were the same for both Medes and Persians, with only such slight differences as were incident to territorial separation and environment.

These historical references are made merely to impress the truth that monarchy was a fundamental fact in the evolution of the Iranian race. The central principle was not only monarchic, but absolute. It was a tyranny on a large scale, and nothing more autocratic or cruel has been seen in the way of government among men. The genesis of the system was military. It was a warlike chieftainship, grown great and established in a local autocracy, surrounded with luxury and the implements of despotism. It is not intended in this connection to enlarge upon the

Warlike form of Iranian institutions.

particular features of the old Medo-Persian imperial government. It is sufficient to note its existence as one of the striking aspects of ancient civil society.

The absolute and cruel character of the institution had two roots of bitterness. The first was in tribal warfare, arising from leadership in which the mythical kings gradually arose to wider and still wider dominion until all the Iranian countries were consolidated in one. The second source of the characteristics of the Medo-Persian power was deduced from an inherent intellectual and moral quality of the race. It had been a cruel and vindictive race from the time of its separation from the Indic family and the establishment of the principle of dualism in the national belief. As soon as the Old Iranian priests had developed the evil hierarchy of Ahriman and his bad angels, the people came to regard themselves as in a constant conflict with the adverse powers of earth and heaven. To put down these terrestrial and celestial foes, or to conciliate them, or to beat them by subtlety became a necessity of the national life. It was a perpetual warfare with demons, and the actual warfare with men soon gave the enemy the character of devils.

War passion and cruelty the attributes of the race.

The wild freedom of the race during its tribal stages of development, the bloody conflicts of the chase, the reactions of the dreary desert in summer and of snowstorm in winter, all intensified the instincts of the people, and added to the vindictive malevolence of their character. The ferocity of the Median soldiers became proverbial in all nations where their name was known, and as late as the time of Augustus, Horace, in his *Secular Hymn*, could find no stronger historical reference in illustration of the power of the empire than to cite the subjection of Iran:

Ferocity of the Medo-Persian soldiery.

MEDIAN SOLDIERS.—Gravure by Bazin, after a photograph of the bas-relief of Chapour.

"Now by the sea, and on the land, *the Mede*
Fears the strong squadrons and the ax of Rome!"

While this civil evolution from the primitive tribal condition of the Old Ira-

nians into a despotic monarchy had been in progress, a counterchange was occurring in the religion of the race. It was a change to a lower and idolatrous level. It is easy to note the process by which the high concept of Ahura-Mazdâo and his court of hierarchs was brought down again to a coïncidence with material objects. The first and greatest of these was the sun. It may be frankly confessed that sun worship is the highest and most rational form of idolatry. Even modern science has verified that conception of the ancients which made the sun the lord of day and the origin of life. As the dominant object of the material universe, he has naturally attracted the wonder, the awe, and the reverence of all primitive peoples.

Deterioration of Zoroastrianism into fire worship.

PERSO-MOHAMMEDAN TYPES—ARAB CHIEF IN THE HOUSE OF A SHEIK.
Drawn by E. Ronjat, after a photograph by Madame Dieulafoy.

In a country such as Iran the ascendency of the orb of day would be especially striking. The Zoroastrian idea that Ahura-Mazdâo was the living one, and that his prime angel, Sraosha, was the lord of light, brought both concepts into close affinity with the sun as the king of physical nature. His warmth and radiance were qualities most sensible and grateful to the bodies of men, and it was easy to ascribe to him the attributes of a godhead. The Old Iranian beliefs took this course, and the next descent brought in the element of *fire*. It was a symbol and analogue of the sun. It was the sun localized on the hearthstone and the altar. One

may easily perceive the whole course of degeneration from Sraosha to the flame of fire.

By the time of the Medo-Persian ascendency under the Achæmenian kings, the transformation from original Zoroastrianism to fire worship was complete. The great Persian armies which were led by Darius and Xerxes to the West, except in so far as they had gathered out of the satrapies on the hither side of Mesopotamia, were all worshipers of fire. The religious ceremonial of the Persians had taken that fixed form which it has maintained to the present day. The Parsee altars on the hilltops of Fars and Yezd, and the smoking summits seen here and there in Bombay, are at once the remnants and illustrations of the striking but idolatrous ceremonial which was already established when the Medo-Persian race was dominant throughout Western Asia.

Wide prevalence of the sun- and fire-idolatry.

It is the purpose of the present book, devoted to the subject of ethnic character, to note not only the peculiarities and race distinctions of the ancient peoples, but also to delineate the character and peculiarities of their descendants. The Old Iranians have their representatives in the races distributed between the Caspian and the Indus. If we glance over the whole field we shall find that the Western peoples of this group have best preserved the lineaments of the ancient stock, while those of the East, next to India, are graded off into the Oriental type. This is true not only of physical, but also of mental and moral characteristics. The Iranian peoples next to Hindustan pass almost imperceptibly into the character of the Indian races. The religious propagandism of Islam has carried the faith of the Prophet and the institutions of his followers into these regions as well as into India, and the result is manifest in the establishment of common customs and in a modification of the old national character.

Ancient Iranian character survives in descendent races.

CHAPTER XXXVI.—ETHNIC DIVISIONS AND CHARACTERISTICS.

IF we enter the west of what was ancient Iran and begin an examination of the present representatives of the primitive stock, we shall find first of all the Armenians. The central locus of this race is now found in Astrakhan, that portion of European Russia next the Caspian. Even in this region the ancient Iranian blood has been considerably deteriorated with Semitic and Turanian admixture. The language, called the *Haikanic*, from Haiks, the name of the Armenians in the vernacular, has been developed into an independent tongue, strictly Iranic in its origin and in most of its characteristics. A literature of some merit has sprung up, even in the absence of national unity. The ancient writings have been edited and translated into the vernacular, and a considerable intellectual activity is otherwise shown by the people.

The language and literature known as Haikanic.

In their complexion and person the Armenians are not very different from

the peoples of Southern Europe. They have fair features, and are regarded as a handsome race. The hair is abundant in quantity, black in color, sometimes straight and sometimes curled. The forehead is low, but well shaped, the face oval, the eyes full of expression and prominent, the lips thick, resembling those of Afghans. What is called the expression of the Armenian face is divided between the features of Southern Europe and those of India. In stature, the people are rather above than below the average of mankind, are lithe in form and agile in action. The Armenians are taller than the Afghans and the Beluchs. Here we have again a grading down of the physical forces toward the east, the people of the Indian border being lower and less active than they of the west. The odd circumstance of large and clumsy feet must not be overlooked in noting the bodily peculiarities of the Armenians.

Ethnic features and off-grading of the Armenians.

This people are peculiarly tenacious of ancient customs. They have preserved, even from remote antiquity, a considerable part of the social and religious life of the Old Iranians. Their laws are like the common law of the English-speaking race, derived from precedents of common life, reaching back to the times of tribal dispersion. The popular dress preserves many of the features which were peculiar to the age of the Persian ascendency. As a general fact, the Iranians have always been disposed to wear a high dress for the head, a sort of tiara, of which illustrations may be seen in the everyday costume of the Persians, both men and women, and of nearly all the peoples as far east as India. The outer garments of both men and women are loosely worn, and descend below the knee. The men have trousers, and are belted at the waist. On the whole, the effect of the costume is rather Oriental than suggestive of the apparel of Western peoples.

Armenians preserve the semblance of Old Iranian life.

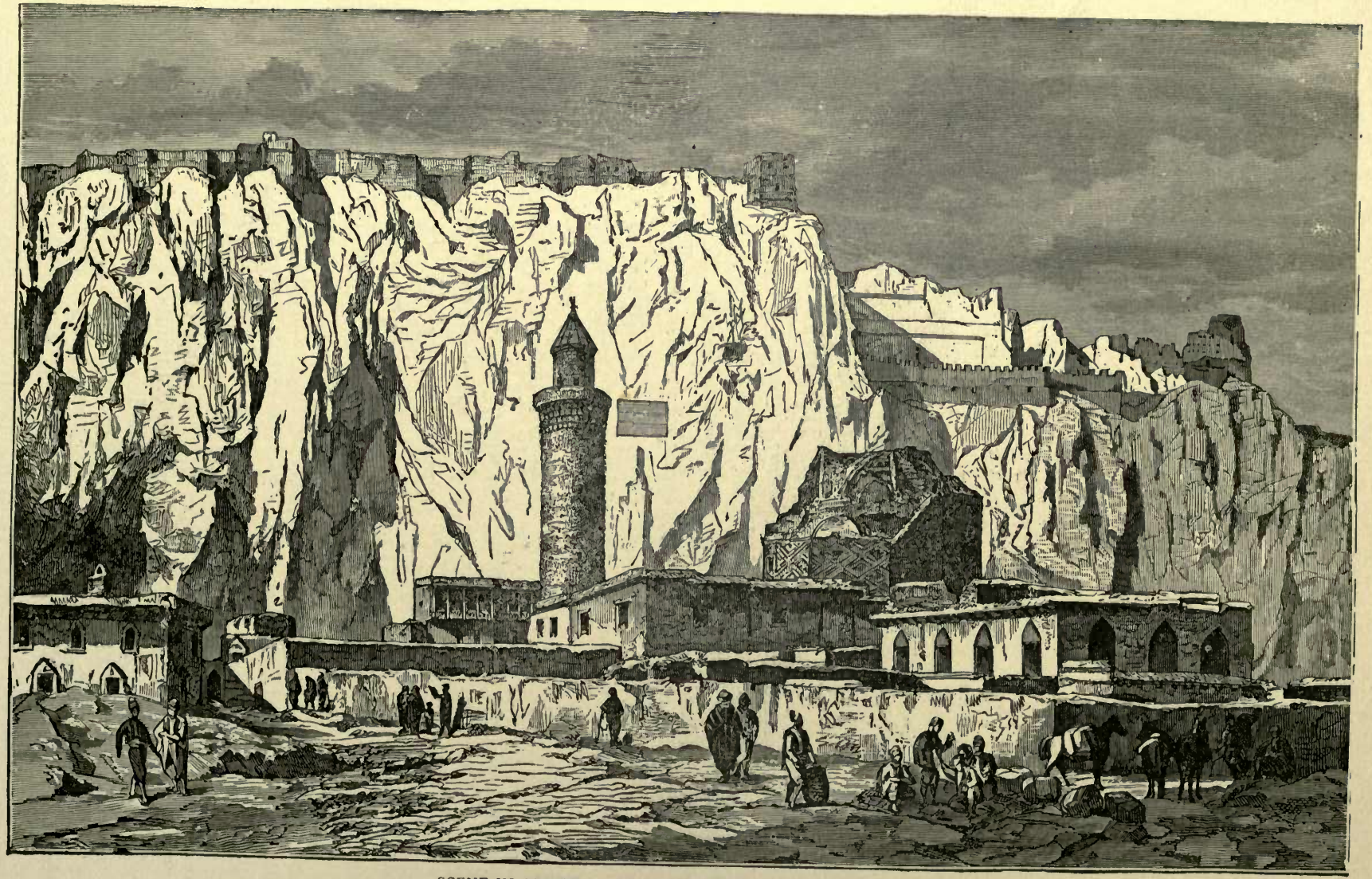
ժունքները կատարեն՝ որպէսզի իր աշակերտը ըլլան:

Դուն քեզի համար որոշելու ես, կամ ընդունիլ՝ և կամ ձգել. կամ Աստուած ընտրելու ես, և կամ սատանան: Մաղաչեմ որ ինքզինքդ բոլորովին աս գործին տաս, և ան ալ՝ անմիջապէս, քանզի վաղը քուկդ չէ: Մի՛ ջանար կէս կէս քրիստոնեայ ըլլալու. քեզ կը վստահացնեմ թէ բնաւ ճշմարիտ խաղաղութիւն՝ հանգստութիւն և ուրախութիւն պիտի չը տեսնաս, թէ որ ուզես մէկ ձեռքովդ երկինքը բռնել՝ և միւս ձեռքովդ աշխարհքը: Ամէն բան ձգէ, կորսնցուր քու կեանքդ որ նորէն գտնաս: Յեսուին պէս ըսէ, "Բայց ես՝ ու իմ տունս Եհովան պիտի պաշտենք:" Ու եթէ աս ընտրութիւնը ընես՝ լերջին օրը դուն քեզի դէմ վկայ պիտի ըլլաս, թէ

SPECIMEN PAGE FROM ARMENIAN BOOK.

The Armenians are a shrewd and rather intellectual race. Were it not for the effects of old traditions, religious and social, they would have the capacity of a good modern development. They are brave and adventurous, good soldiers, and especially noted for their ability in

Intellectual qualities of the race; spirit of independence.



SCENE IN ARMENIA.—Rock of Van.—Drawn by Th. Deyrolle, from nature.

the transaction of business. In general, they present what many ethnographers have chosen to call the Caucasian type of mankind at its best estate.

In common with the other peoples of Western Iran, the Armenians exhibit a certain spirit of independence and love of liberty. They regard valor as the principal virtue of life. In the cities of Armenia society is well organized, but in the open regions, especially in those parts where the country becomes mountainous, the population consists of vigorous shepherd tribes, who are almost as individual in their character and as little subject to restraint as were their prehistoric ancestors.

For this reason it is somewhat difficult to generalize on the subject of manners and customs where the same are so variable in different districts, One thing may be noted with peculiar interest, and that is the complete change in the method of disposing of the dead. Zarathustra required that the bodies of the dead should be exposed on high, in a kind of tower or building erected for

ARMENIAN ARCHBISHOP—TYPE.—Drawn by Y. Pranishmkoff.

Change in the method of disposing of the dead.

that purpose, so that birds of prey might gradually devour them. It was conceived that this, of all possible methods, was least likely to contaminate the elements. It was held that earth burial would pollute the ground. To submerge the body in rivers would defile the water, and to consume them by fire would poison the air, and even heaven. The Zoroastrian plan, finding as it does a strange reflection in the method adopted by some of the American Indians, was thus produced as a means of preserving the purity of the elements against the noxious influence of dead bodies.

ARMENIAN FAMILY—TYPES.
Drawn by A. Sirouy, after a photograph by Madame Dieulafoy.

The modern Iranians have given up the old method as no longer practicable. If they are Mohammedans, they employ the plan in vogue among the followers of the Prophet; if Christians, they adopt the Christian manner. In either case the burial is in the earth. There is generally something of Oriental fantasy attending the circumstance of death, something of Semitic clamor, and also traces of aboriginal superstitions. In October the Armenians have a festival, which they call the Feast of the Dead. On such occasions the cemetery is lighted with fires, kindled here and there. Tapers are set on the graves, and the women abandon themselves to weeping and wailing.

Mohammedan and Christian usage has supervened.

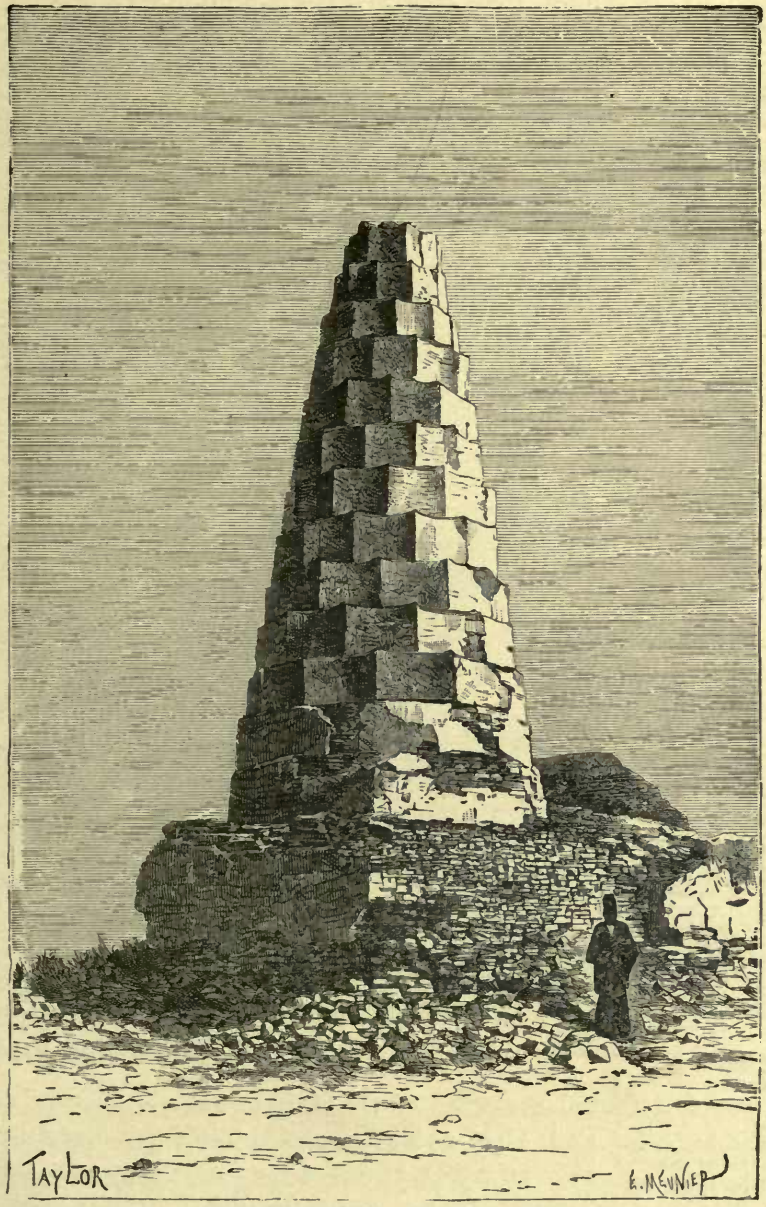
Over the Armenian graves tombstones, on which are cut the effigies of rams, horses, or lions, are set up, a custom as ancient in its origin as the tribal dispersion of the Iranian race. It is evident that such sepulchral imagery preserves the primitive belief in sacred animals and their guardianship over men. One of the earliest superstitions of the human race was that of the power of certain animals to intercede with the gods. We shall see that in Egypt, and even among the Greeks and Romans, there was a prevalent suspicion that the ram was an efficacious mediator between the deities and human kind.

Character and sense of gravestone effigies.

The ancient nomadic life of Iran is best preserved by the Lures, another branch of the race, having its central locus in Luristan, but spreading therefrom northward and northeastward, through

Certain Persic types represent the ancient race.

modern Persia as far as the Caspian, and into the province of Mazanderan. These people are in many respects like the rude classes of the Armenians, but are still more nearly allied with the inhabitants of Kurdistan on the west. With the latter people the Lures have many things in common, not the least of which is the thieving disposition for which the Kurds are proverbial among all peoples. It is noticeable that among the Lures many ancient customs of the Iranians are preserved, and this in despite of their conversion to Mohammedanism. One tribe, called the Guranes, are associated with the Dushik Kurds as a sort of peasant caste distributed among them. On the western coast of the Caspian sea another group of the same people, called the Tats, are found. Indeed, the Lures are scattered through the whole of Northwestern Persia, as that empire is now constituted, and far out into Kurdistan, to lake Van and the upper valley of the Tigris.



TOMB ON THE BORDER OF KAROUN.
Drawn by Taylor, after a photograph by Madame Dieulafoy.

One might well suppose, glancing at the fruitful and luxurious valleys of Luristan, that any people long dwelling there would abandon the nomadic life and settle into fixed pursuits; but such is not the case. Wandering tribes still possess the country, dwelling in tents, owing allegiance only to their own chiefs, and engaged in almost constant warfare. Of these, the most conspicuous example is the ferocious Bakhtiyari, whose name is proverbial in Western Asia. The only town of any im-

portance within the limits of Luristan is Khorramabad, which is said to contain a thousand huts. The place is rudely fortified, and possesses the palace of the chieftain of the Lures.

Prevalence of the wandering life in Luristan.

The next great division of the Iranic sivan, or Persians. They are the most widely distributed of any of the existing Iranic families. They are even dispersed into districts far beyond the limits of their own countries. Their language is Persic, and is the best representative, or rather lineal descendant, of

MOURNERS WAILING.—Drawn by Y. Pranishnikoff, after a sketch of Madame Carla Serena.

race, distributed eastward of the Lures and the other western Persian tribes, includes the Tajiks. These people are spread from Kabul northward to Badakhshan, to the table-land of Pameer, and into Bokhara, in Central Turkistan. On the east they lie against the Afghans and Beluchs. Westward, they spread into all Central Persia, and are called Par-

Place and character of the Tajiks, or Parsivan.

the ancient Iranian speech. By them also was preserved, until the conquest of the country by the Mohammedans, the deteriorated or fire-worship aspect of the old Zoroastrian faith. After the conquest they became Mohammedans, the old religion being preserved only by the Guebers.

In stature, person, and complexion the Tajiks are intermediate between the

Armenians and the Kurds on the one hand, and the Afghans on the other. They are not so tall or agile as the one, and not so dark-skinned and Oriental as the other. They are comparatively small in person, but heavy in build. The limbs, and especially the feet, are large, and the face broad. The features,

Stature and ethnic characteristics of this people.

rior in appearance to the intermediate race.

But the Tajiks, perhaps best of all, preserve to modern times the general character of the ancient Iranic race. The Armenians compete with them in this respect. The old customs and manners of Iran have come down by way of

They present strongly the Old Iranian traits.

BAKHTIYARI TYPES.—Drawn by G. Vuillier, from a photograph.

however, are good, if we except the mouth, which is large and coarse. The type is not by any means so favorable in the judgment of Western peoples as that of the nations of the Caucasus. Even the Kurds are larger and handsomer than the Tajiks, and some ethnographers pronounce the Afghans, who are not infrequently of good stature, to be superior to the Tajiks and Kurds of Persia, and represent to the modern inquirer a tolerably authentic transcript of antiquity. It is quite likely that many features of the costume of the modern Persians, such as the old tiara, or high cap, which was worn by the subjects of Cyrus the Great, are more faithfully preserved in the current styles than is the Persian character

and person upon which they are exhibited.

The cruelty and tyrannical disposition of the Medo-Persians in the times of the greatness of the race has already been referred to. Even this bad nature has suffered a terrible degeneration, and is more repulsive in the coarseness, treachery, and immorality of the modern Persian character than in its ancient aspect of fierce brutality. The race is avaricious and untruthful. There is little intellectual development; and if corruption of heart and life were the only term definitive of savagery, the whole race might well be dismissed as savages. Much of this degradation, however, must undoubtedly be attributed to the trying exigencies through which the Iranian peoples have passed. The Mohammedan conquest was of itself a sufficient shock to destroy nationality; and the substitution of Islam for the Old Iranian faith aggravated the calamity.

Cruelty and fierceness of the Persic stock.

The modern Persians may be ranked among the principal races of Asia. In Western Asia they compete with the Turks and Russians for the first place in ethnic importance. The race, however, lacks homogeneity. It is more mixed than either the Turkish or the Russian stock. In Central Persia the ancient race of Iranians is represented in tolerable purity in the descendent people. But all around the borders this is not true. On the west, and particularly the south-

Race character of the modern Persians.

USBEK AND TAJIK TYPES.—Drawn by A. Ferdinandus.

west, there is a strong admixture of Turkish blood. On the north and northeast the Mongol stock of mankind has made itself felt and given a tinge to the race complexion; while on the side of Afghanistan and Beluchistan, Indian or Hindu characteristics are plainly discoverable.

The Persians at the present time number approximately eight million. Of these nearly two million are townspeople. About an equal number are Iliyats, or nomads, of whom we shall presently speak. Between these two extremes of stationary citizens and wandering tribesmen there is a large intermediate class of villagers who are more sedentary than nomadic in habit. These number hardly fewer than four million. They constitute the great intermediate body of Persians, and are the element upon which the Shah's government most relies in the matter of the Persian army. The national forces, however, are recruited to an extent from the wilder tribesmen; while the official classes, commanders and the like, are derived from the townspeople or citizens who correspond to the aristocracy of Western Europe.

Classes and conditions of the Persian population.

KURD TYPES.—Drawn by F. Courboin, from a photograph.

No class of the Persian population is of greater interest to the traveler and ethnographer than the Iliyats, or wandering herdsmen. Of these, the manner of life is pastoral rather than agricultural.

Ethnic place and manner of life of the Iliyats.

FALCONER OF THE SHEIK.—Hindu-Persian Types and Costumes.—Drawn by A. Sirouy, from a photograph by Madame Dieulafoy.

They are organized into tribes, of which the name is legion. Over each tribe is set a hereditary chieftain, who commands in war and peace. His authority is quite absolute. The manner of life has respect to a division of the country into pastoral districts. Each tribe has its own district, and the same may be said of the minor clans and families. Though all wander about with their flocks, obeying the suggestion of the season as to pasturage, the wandering is within the limits of the clan lands. Each tribe has its own section in the hill-country, and to this region it betakes itself with the coming of spring, and there the tents are pitched until with the advance of the season a removal to better grounds is necessary. But each tribe in its wanderings must confine itself to its own section.

The social and domestic life of the Persians has been derived from the institutional forms of Mohammedanism. Soon after the rise of Islam in Arabia and its spread into Syria the Crescent was carried victoriously into Persia. A religious conquest of the race was soon effected, and the faith of the Prophet was substituted for the former paganism. It was the incoming of a Semitic religion, and of the usages thereto belonging, into an Iranian, that is, and Aryan, country. The event was not unlike the previous conquest of Europe by Christianity. In either case we have an Aryan people accepting from Semitic prophets and their followers a new religious system.

Social and domestic life derived from Mohammedanism.

Islam brought with it polygamy. We have hitherto remarked upon the fact that Persia is the line of ethnic breakage between the Orient and the West. By race the Persians were inclined to the usages of the Indo-European family of mankind. But by the religious contest they were led to adopt the theory of Mohammedanism. This brought, within certain limits, the system of multiple marriage. There is thus a counter force playing upon the domestic life of the race. Polygamy, though prevalent, has not been so universal as in Arabia, Egypt, and Turkey. The Persian family and household, however, are organized on much the same basis as in the countries just named. The domestic usages are largely of the Arabian and Egyptian type; but are in part determined by the ethnic instincts and Old Iranian biases of the race.

Polygamy substituted for the ancient monogamy.

The Persian family is better in most of its features than that of the Turks. With an equal degree of culture and refinement the comparison would be still more favorable to the former people. In the homes of the better class of Persians there is elegance of manners, luxurious surroundings, and many forms of comfort. The children are reared at first by nurses, and are afterwards committed to the schools under charge of Mohammedan instructors. The women are in great measure secluded, and are partially veiled in public. Notwithstanding the serious and rather sinister expression of the Persian face, the countenance of the woman is often regular and beautiful. The artist in search of fine types of beauty and elegance, even after he has studied the faces of the women of Cashmere and Georgia, may well pause to admire the sweetness and warm expression of the Persian women.

Character of the Persian family; the women.

Just as the social system of the Persians has been derived from Islam, so also the architecture of the country has been copied from the Mohammedan countries. The original type of this manner of building was arabesque; but

Architecture of Persia derived from Mohammedan styles.

MUSSULMAN NURSES AND CHILD—TYPES AND COSTUMES.
Drawn by Adrien Marie, from a photograph by Madame Dieulafoy.

this style has suffered considerable modification in the hands of Persian architects. In the building of mosques and tombs the Arabian manner has been well preserved. Indeed, the forms and ceremonial of Islam made this necessary. The minaret is everywhere a part of the Mohammedan church and religious establishment. If the circular domes are not also a necessary part, they are at least a part established by the usage of eleven centuries. These features of building assert themselves strongly in the major architecture of the Persians. Some of the finest edifices of this style are the tombs of the Persian great, seen in many cities and sacred places.

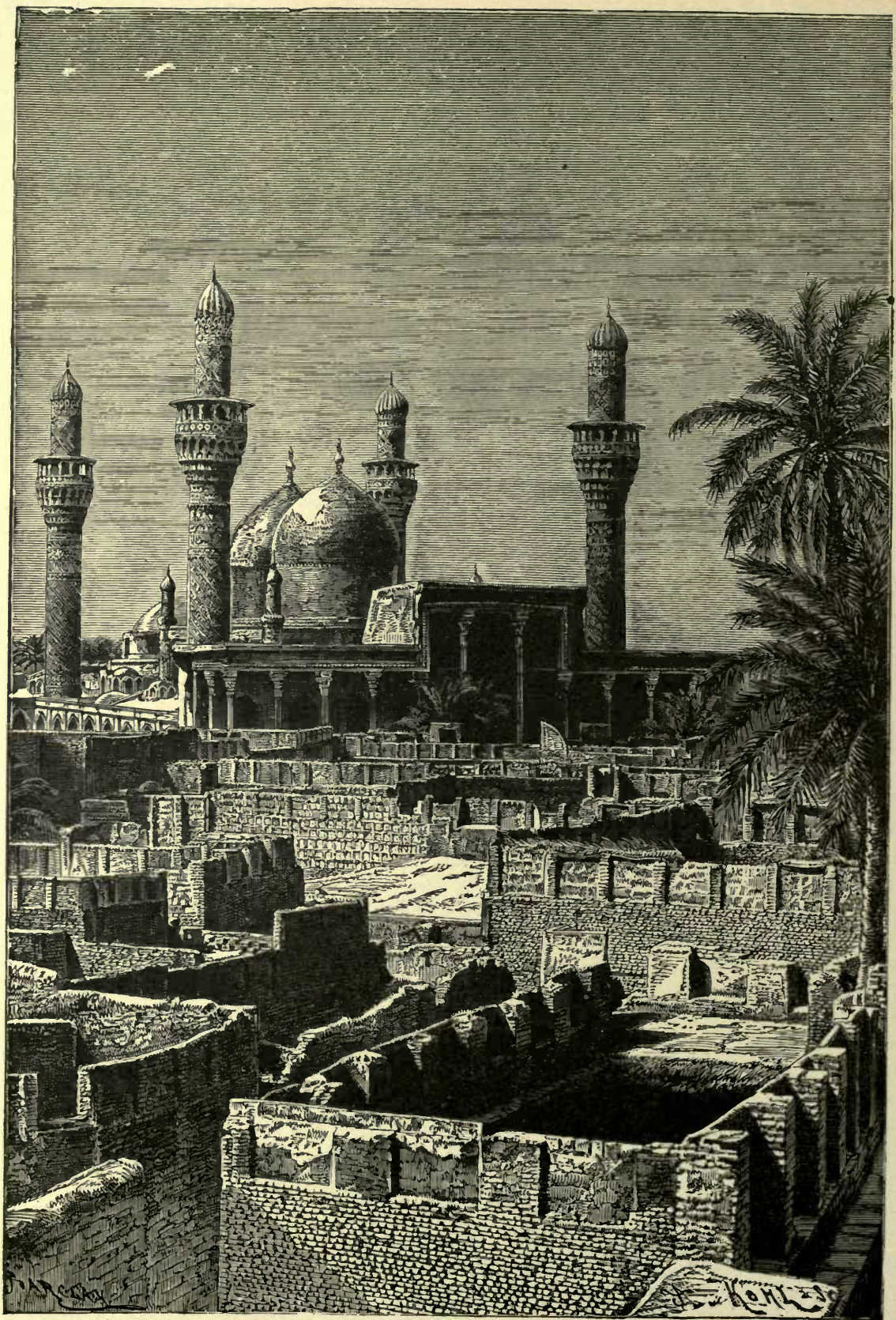
One of the most remarkable of these structures, typical of all, but preëminent by its vastness and elaboration, is the tomb of Iman Mousa at Kazhemeine. This remarkable edifice is surrounded with buildings of stone or marble, but rises above them with its four minarets and two domes in a manner at once majestic and beautiful. Others of the Persian tombs, like that of Zobeide, are derived as to their style from the building of the ancient Iranians. That people, as the reader knows, invented the burial tower on the top of which the dead were exposed to be devoured by birds. This pagan form of disposing of dead bodies was Zoroastrian in its first intent, as it is Parsee in its last evolution. The form of the burial tower has been transmitted to Persian architecture, and though greatly modified in the hands of the builders of the last eight centuries, it still reäppears in tombs. In such structures the ground plan is hexagonal. This form is carried up sloping slightly to a considerable height, and is then surmounted with a sharp pyramidal tower of stone shooting upwards much in the form of the ancient burial towers of the Zoroastrians. The materials of such building are cut stone and bricks.

Tomb-building of the race; the burial tower.

YOUNG LADY OF ISPAHAN—TYPE.
Drawn by Adrien Marie, from a photograph by Madame Dieulafoy.

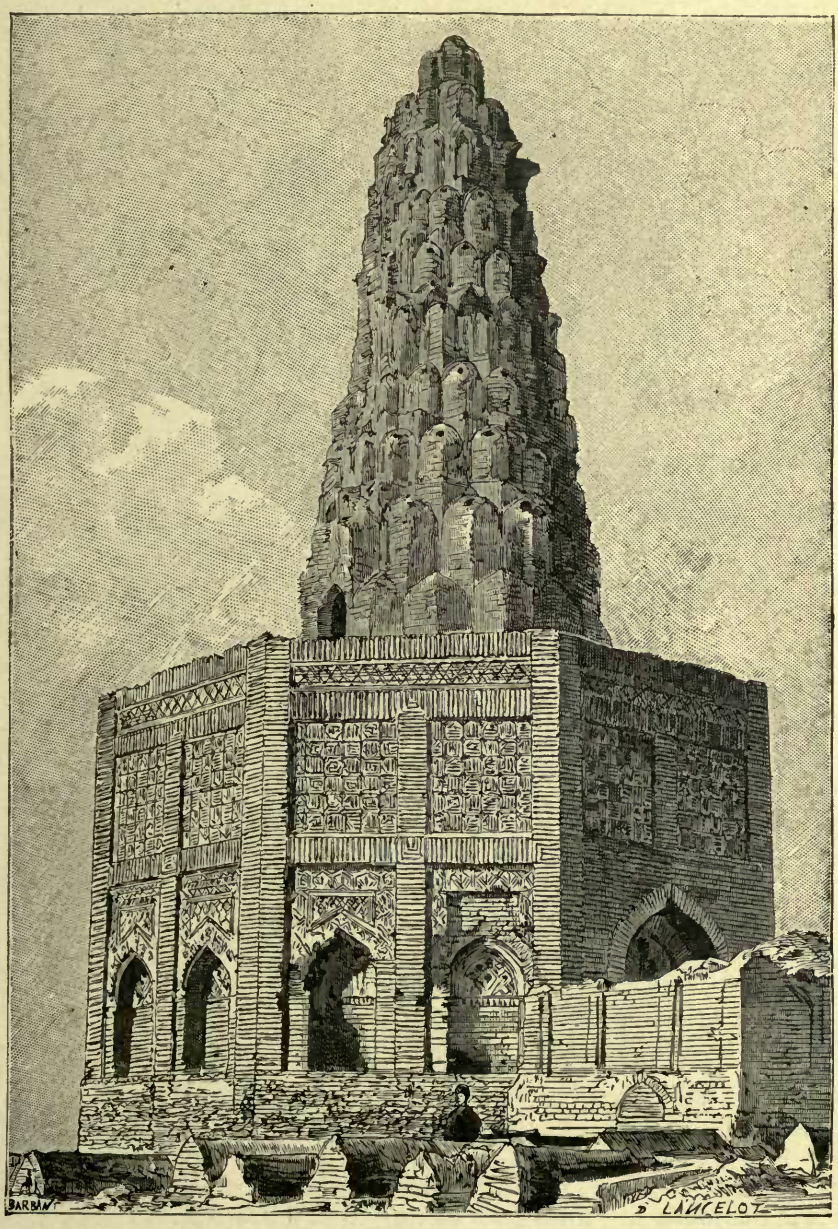
The smaller architecture of the Persians has but little interest to the traveler. The houses of the people are square in ground plan and have flat roofs. This gives to the structures the appearance of cubes. The materials are wood, brick,

Aspect of Persian houses and towns; interior decorations.



ARCHITECTURE OF THE PERSIANS.—Tomb of Iman Mousa, at Kazhemeine.—Drawn by Barclay, from a photograph.

and stone. White is preferred as the color of the exterior. The plan is uniformly followed, and the appearance of buildings is correspondingly monotonous. The Persian town or city is unattractive in itself, though the surroundings are beautiful. It is the custom to plant gardens and orchards around the towns in close setting against them. The abundance of rose trees and other flowering shrubs in the gardens and yards make the towns to appear embowered. Viewed from a distance the picture thus afforded is sometimes exquisite. But within the cities the illusion is dispelled. The streets are never improved. They are merely narrow roads of clay, and are always either dusty or muddy. They are too narrow as a rule to permit of the passage of wheeled vehicles, and are uneven for want of paving.

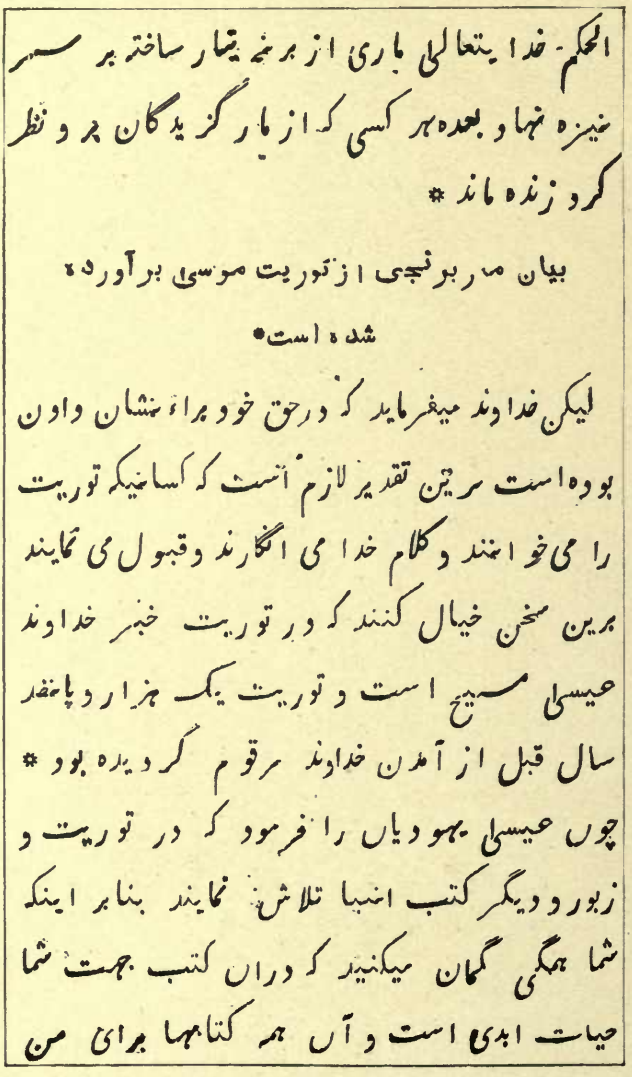


PERSIAN STRUCTURE.—TOMB OF ZOBEIDE.
Drawn by D. Lancelot, from a photograph by Madame Dieulafoy.

The disposition and tastes of the Persians, however, have compensated for the lack of beauty without by elaborate and luxurious furnishings within. There is much that is Oriental in the interior decorations and arrangement of the houses. The tapestries are exquisite, with sofas and ottomans on every hand. Especially on the women's side of the court is such richness displayed. The arrangement of the apartments betokens

ease, indolence, leisure, pride, and indulgence. These are the qualities of the race.

The character of the Persian language has already been indicated in the account of the parent Iranian speech from which it is descended. The order of linguistic development has been from Sanskrit to Zend, from Zend to Old Persian, from Old Persian to the current speech. The common features and peculiarities of the Aryan tongues are seen in the decay of the ancient grammar and the substitution of prepositional forms. The new style of speech began with the national poet Firdusi, and has been perfected by the poets and romancers of the present century. The course of the language is in strict analogy with the movement by which Latin has become Portuguese and Anglo-Saxon been transformed into English. The Arabic literature has meanwhile performed for Persian almost the same office of refinement and foreign ornamentation as that of Norman French interfused with our own tongue.



الحکم- خدا یتعالی باری از برنج یتیار ساخته بر سر
نیزه نهاد و بعده هر کسی که از مار گزیدگان بر و نظر
کرد زنده ماند *

بیان مربرنجی از توریت موسی برآورده
شده است*

لیکن خداوند میفرماید که درحق خود براء نشان داون
بوده است برین تقدیر لازم است که کسانیکه توریت
را می خوانند و کلام خدا می انگارند وقبول می نمایند
برین سخن خیال کنند که در توریت خبر خداوند
عیسی مسیح است و توریت یک هزار و پانصد
سال قبل از آمدن خداوند مرقوم گردیده بود *
چون عیسی یهودیان را فرمود که در توریت و
زبور و دیگر کتب انبیا تلاش نمایند بنابر اینکه
شما همگی گمان میکنید که دران کتب جهت شما
حیات ابدی است و آن هم کتابها برای من

SPECIMEN PAGE OF PERSIAN BOOK.

Linguistic evolution; influence of Arabic.

The governmental system of the Persians is the result of an evolution extending backwards to the classical ages. Persia has had a continuous civil history for at least twenty-three centuries. The administration has been many times transformed with the successive revolutions and changes of race in the country. Nearly always the government has been a despotism with few constitutional checks or limitations. This was true as far back as the ascendency of the Achæmenian kings. The modern system was virtually instituted with the Mohammedan conquest of Persia in the eighth century.

Governmental system reaches back to classical ages.

At the head of the government stands the shah, who is at once emperor and vicegerent of the Prophet. He occupies much the same relation to the people as does the sultan of the Turks to his subjects, but is less restricted by law and constitution. He exercises the right of absolute government, and implicit obedience is ex-

Place of the shah; his absolutism.

acted so long as his rule and mandates do not conflict with the Koran and its interpretation.

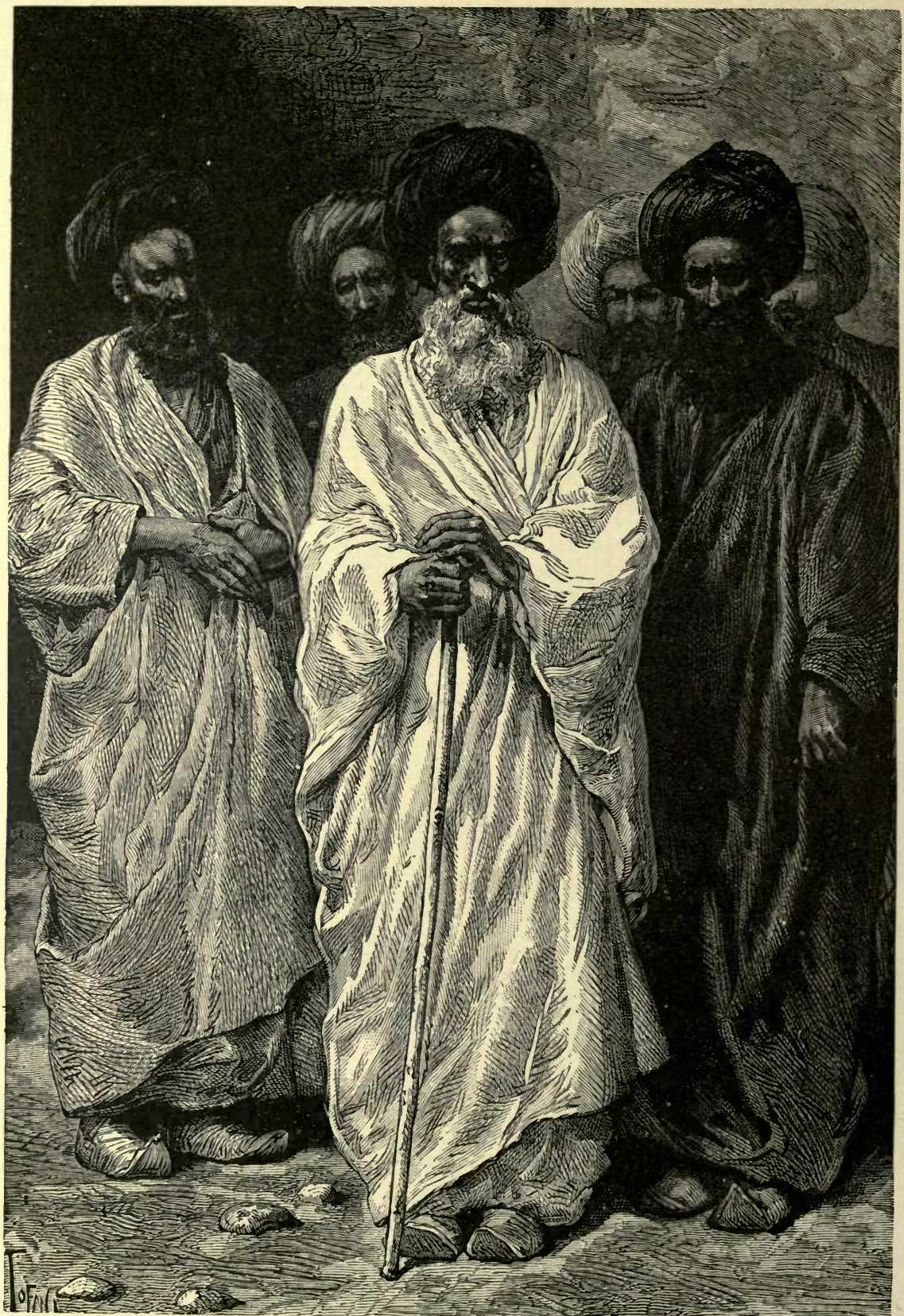
Civilization has sufficiently advanced in Persia to compel some conformity of the political system to the usages of modern governments. This has resulted in a ministry as a means of executive administration. The ministry, however, is almost wholly dependent upon the will of the shah. He removes and appoints the members of his council in a manner arbitrary and capricious. Some ministers easily obtain the royal favor and exercise great power in the state. Others have little influence, and are used by the stronger in the promotion of their own ends.

The departments of government have been organized with some show of regularity. There is a ministry of war, and others of interior and finance, foreign affairs, justice, worship, and telegraphs. The ministers are nobles of high rank, and are set around the throne in a way to add to its reputation and glory. Persia, however, has in her governmental system hardly entered into the family of civilized nations. The skill of the shah and his advisers in statecraft is very limited; and ignorance and passion hold sway in high places.

Departments of administration; organization of the army.

Under the imperial administration the army is organized and is fairly efficient. It is recruited by conscription and poorly paid. One of the means adopted by the shah to obtain continuous and faithful service is to withhold the pay of the soldiers and to keep them long in arrears. The Persian army numbers over one hundred thousand men, of whom about a half are infantry, one third cavalry, and the remainder artillery, etc. The system of revenue is tolerably well organized, and the credit of the government is sufficient to enable the shah and his ministers to make loans in the money markets of the world.

NASR ED DIN SHAH—ROYAL TYPE AND COSTUME.
Drawn by H. Thiriat, from a photograph.



TYPES AND COSTUMES OF THE ZAGROS HIGHLANDS.—Mutcheid of Tauris and his Officers.—Drawn by Tofani.

The manners and customs of the Persians have been derived in part from the ancient race character, and in part from the institutions and influences of Islam. From the latter source has been deduced the easy-going habit of the Persian in his intercourse and manner of life. In this respect he departs greatly from the habits of his kinsmen in Europe. Contrary to common report the Persians are affable and polite, at least such as are refined by the influences of cities and the scholastic pursuits. The different races inhabiting Persia present types quite diverse as it respects manners and usages. Those of the northern provinces and in the northwest, where the race spreads out to the Armenian highlands, are rougher and more uncouth in person and life, while they of the south and of the principal cities have been civilized into forms of ethnic life much more polite and attractive.

Derivation of manners and customs; varying characteristics.

Slavery is a common form of Persian society, though the institution is not strictly based on either color or race. The slaves vary greatly in complexion and belong to several races. Those imported from Abyssinia are of greatest value. Somaliland has contributed to the slave population, as has also the interior of Africa. The slave market is always open and the institution is quite universal, but is less barbarous than the corresponding forms of servitude in other countries. The slaves are regarded as a kind of protected class, and to this extent share the common treatment which is extended to children and domestic animals.

Slavery and the slave market among the Persians.

The costumes of the Persians are picturesque and not unattractive—according to Eastern standards. Men wear a cotton garment fastened in front and falling below the heels. It fits loosely about the person, having wide sleeves and no collar. Several colors are used in dyeing such garments. Trousers are worn by the higher classes, especially by the military orders, among whom Western fashions begin to prevail. The outside garment is a shawl, generally of some fine material like silk or satin. The length and quality of the garments, particularly of the cloak worn by nobles, indicates the rank of the wearer. Priests,

Materials and styles of costume; rank indicated thereby.

FANATICAL TYPE AND COSTUME.—DERVISH OF THE TIGER-SKIN.
Drawn by A. Ferdinandus, from a photograph by Madame Dieulafoy.

merchants, townspeople, storekeepers, and professional men are distinguished by the long cloak which generally falls to the heels. The costume of the shepherds and country people is more simple in structure and of cheaper materials. The custom of shaving the hair at the crown is common though not universal. The face, except in the case of ultra fashionable men, is unshorn, the beard being one of the distinguishing features of the race.

Apparel of women; arms and arm-bearing of the Persians.

The costumes of the women are pretty, and are Oriental in their main features. The ladies of high rank wear shoes of colored leather, while the men, particularly the soldiers, are booted in the manner of Eastern Europe. Arms are permitted to the greater part of the population. The tribesmen of the open country generally go armed. Most of them carry what is called a kammah, or dirk, dangerous to the enemy. These knives the wearers are said to use in a hacking manner, not stabbing or thrusting as is the usage of those who kill in the West.

Painting the face and the type of beauty.

Painting the face is customary only on important occasions or with fashionable ladies. The cheeks are painted and the eyebrows improved according to the taste or whim of fashion. The type of beauty most admired is the circular countenance and complexion. The Persian women are much smaller than the men, and are noted for their tiny hands and feet.

Ethnic place and character of the Afghans.

Directly between Persia and India lie the Afghans. They call themselves in the vernacular, *Pukhtaneh*, from Pukhtu, the native designation of the language. It is here that the Iranian race is graded off into India. The most southern division of the Afghans included the Lohanis, who are distributed on the east of the Suleiman range, where they maintain a nomadic life in tribal separation. The Eastern Afghans are known by the name of Berduranis. They also have tribal divisions, and approximate the Indian character. Southward of Cabul live the West Afghans, divided into the two principal tribes of Ghilzaïs and Duranis, the latter occupying the southwestern angle of Afghanistan.

General features of the race; foreign admixture.

In person, the Afghans are described as being of medium stature. They have short necks, making the head appear to rest upon the shoulders. Their complexion is dark, and the skin has that glossy, velvety character peculiar to the Black races. In the flat nose there is another hint of southern admixture. The lips are thick, and the line of the eyes horizontal.

Throughout the whole of Afghanistan there is a considerable element of foreign population, and the intermixture of this with the native blood has greatly modified the personal character of the race. The women have handsome features, suggesting the faces of Jewesses. They are much fairer than the men, sometimes rosy, though more usually pale. They wear the hair braided, plaited in two long tresses, with silken tassels at the ends. The influence of Mohammedanism has driven the women into seclusion, but intrigue and violence frequently prevail over superstition, and in parts of the country there is much license between the sexes.

Tribal divisions of the race and their manner of life.

The whole population of the country is divided into about a dozen tribal organizations. These conform to the clan in character. The Duranis and the Ghilzaïs have already been mentioned.

HUZAREH TYPES.—Afridis Attacking English Troops.—Drawn by Emile Bayard.

The Yusufzaïs live in a hill tract north of Peshawer, where they maintain a semi-independence. They are regarded by the Afghan chiefs as among the most turbulent race with whom they have to deal. The Kakars, also in Southeastern Afghanistan, are comparatively independent. Their country is very difficult to explore, and but little is known of their manner of life.

PERSIAN SCHOLAR—TYPE.—HAJI MIRZA-UGHAZZI.

In several parts of Afghanistan wandering colonies of Persians known as Kizilbashis have settled. They bear the character of Persianized Turks, and speak the Persian language. They are found chiefly in the towns, where they maintain themselves as merchants, physicians, and scribes. Many of them are enrolled in the Afghan cavalry and in the Indian regiments of the English army. The Huzareh dwell in the mountain country, in the northwest of Afghanistan, among the spurs of Hindu-Kush. Their dwellings are frequently found as much as ten thousand feet above the level of the sea. It is evident that the tribe has been infected with Mongolian influence. It is thought that Mongoloid tribes came from the East with Genghis Khan and settled in this region.

Distribution and character of the Huzareh.

The Huzareh are tributary to the Afghan princes, but they rarely pay their stipend except under compulsion

of arms. They are an exceedingly immoral people, having many of the vices of ancient paganism. They are, however, good soldiers when reduced to discipline, exhibiting the proverbial courage of mountaineers. Many of their manners remind the traveler of the ruder class of Swiss peasants. There is a Huzareh yodel sung by them, after the manner of the Swiss. Other tribes are called the Eimauk and the Hindkis. In the latter term it is easy to see the word Hindu concealed under a vernacular form. They represent certain immigrants from the East, who are scattered over Afghanistan, where they form in many villages and towns quite an important element in the population. They are bankers and traders in lands.

Their immorality; other tribes of East Iranians.

The language and literature of the Afghans have both been infected by many foreign influences. The Mohammedan conquest of the country greatly corrupted the tides of the old national life, turning them into new channels. The admixture of alien elements among the people and their institutions has induced much uncertainty even as to the ethnic classification of the race; but the language is unmistakably Aryan, of the Indo-Persian branch. The vernacular speech, or Pukhtu, prevails everywhere except in Herat. There has been a considerable literary development in modern times. A history was composed by Shaikh Mali as early as the first quarter of the fifteenth century. Poetry has been cultivated by the Afghans. Khushâl Khan, the chief of the Khattaks, was recognized as a bard as early as the reign of Arungzeebe. The foreign infection above referred to, and traced to the Mohammedans, is noticeable in the vernacular Afghan history, in which the people are said to be *Bani-Israil*, that is, children of Israel. The tradition is so elaborated as to give a race descent from the Hebrew patriarchs. This fiction is intertwined with the oldest books of the Afghans, as far back as the sixteenth century. In one of the histories Afghanistan is said to have been settled by King Solomon himself, who gave his name to the Suleiman mountain!

Language of the Afghans; beginnings of literary development.

The manners and customs of the Afghan race are in most respects in close analogy with those of Western Iran. They are the same with the Tajik customs and traditions, with such exceptions and modifications only as have been imported by foreign influence, particularly by the conquest of Islam and the intercommunication with India.

The next great branch of the modern Iranians includes the Beluchs, or native peoples of Beluchistan. Here again the language spoken, called in the vernacular *Baluchekee*, indicates unmistakably the common ethnic descent of these people with the Persians. Indeed, the dialect is so much like New Persian as to point to the fact of a very late separation of the Beluchs from the West Iranians. Here, as in Afghanistan, the people have been infected to a great degree in language and institutions by contact with India. Indeed, there is a dialect spoken by the Brahoes which is manifestly derived from the languages of the Punjab, and not from an Iranian source. All along the border there is a great admixture of the two races, and the prevalence of a common Mohammedanism has tended to a community of institutions and ethnic character.

Place of the Beluchs; race infection on the side of India.

In person, the Beluchs are of about the same stature with the Tajiks. Many of them are above the average height. The prevailing bodily form is lithe, and

NORTHERN BELUCHS—TYPES.—Mountaineers of the Western Himalayas.—Drawn by Emile Bayard, from a photograph.

not suggestive of great physical strength. The people are inured to great and rapid changes of season and climate peculiar to the country, and are exposed by their out-of-door life to many hardships. They bear fatigue, and are capable of long marches and endurance of hunger. They are a brave and predatory race, restless, and addicted to war. The physiognomy is strongly marked, the complexion is almost as dark as that of the Hindus, the nose is broad and flat, the forehead low. The hair and beard are abundant and coarse; the hands and feet, large and heavy, in which feature they are strongly discriminated from the Aryans of India, whose extremities are fine, even to delicacy.

Personal features and race traits of the Beluchs.

The Beluchs have preserved in their character, and even cultivated, the element of cruelty and barbarous outrage which we have noted as peculiar to the Old Iranians. Their social life is marked with many strange customs. They regard hospitality as the prime virtue. A stranger calling at their huts is sure to be entertained as a guest, fed and lodged with all the care which the family are able to afford; but no sooner has he left the protection afforded by this traditional fiction of the East than he is attacked and robbed, or even murdered.

Social customs; industrial pursuits and dissipations.

In all industrial pursuits the Beluchs are indolent and unenterprising, but no sooner is war announced than all the latent energies of the race are excited to fierce action. In times of peace they are dissipated, giving their whole time to gambling, smoking tobacco or Indian hemp-seed, and chewing opium. The in-

WOMEN OF CHIRAZ—TYPES AND COSTUMES.
Drawn by Adrien Marie, from a photograph by Madame Dieulafoy.

terdict of Islam keeps them from the use of spirituous liquors. They are voracious in appetite, devouring immense quantities of flesh, half raw, and filling themselves with other crude articles of food. They season their victuals with capsicum, onions, garlic, and other strong and stimulating flavors, until one unaccustomed to such fiery condiments could in no wise swallow the burning mass.

a method derived from the Levitical law, as modified by the practice of Islam. The old Hebrew usage which required the widow to be taken to wife by the surviving brother is repeated in the Beluch custom. The funeral ceremony demands a watch over the dead body for three successive nights, during which the kinsfolk and friends of the deceased spend their time in revel and feasting.

DOMESTIC MANNERS OF THE BELUCHS.—Interior of Tent.—Drawn by Emile Bayard, after Vambery.

Slavery and the slave trade; marriage and ceremonies.

Mohammedanism has gradually encroached upon the old instincts of the Iranian race. Slavery is universal, each petty chief having as large a retinue as possible. Polygamy prevails. Even the hill peasant will have as many as eight or ten wives, and the number is increased with the ascending rank of the man. Young women are obtained by paying cattle or sheep or goats to the father. The marriage is performed after

Dress of the Beluchs; the peasant garb.

The dress of the Beluchs is similar to the Tajik costume already described. They wear for under-garment a shirt, generally of blue or white calico, buttoned at the neck and reaching below the knee. They have wide trousers, which are open at the ankle. The headdress consists of a turban, which is generally a high silk or cotton cap, quilted and fitted to the head. The chiefs and their relatives wear white

tunics of chintz, which are lined and padded with cotton. The peasants depend for warmth upon a surtout, in which they envelop themselves. The cloth is manufactured coarsely from a mixture of the hair of goats and the wool of sheep. The dress of women is little discriminated from that of men. The trousers of the former are very wide, almost like a skirt around each limb, and are made either of silk or of a mixture of that substance with cotton. The Brahoes, or Hindu Beluchs, have a costume very similar to that of the Beluchs, but of a poorer quality of material and simpler in fabrication.

Within the broad region inhabited by the modern Iranians many subordinate races are found, each with its local peculiarities of character and development. In the far west, high up in the passes of the Caucasus, are found the Ossetes, who call themselves *Iron*, that is, Iranians. They are so strongly discriminated in personal character from their neighbors and from all other of the peoples of the plateau as to suggest a foreign race descent; but their language is Iranian, and they are evidently of the same stock with the other Armenians, the Tajiks, and the Kurds. In stature they are below the average, but are very thickset and strong. The hair is either blonde or red, and the complexion is as fair as that of the Germans. In religious faith and practice the Ossetes are associated with the Armenians, and their habits of life are similar to those of the peasant class of that people. They are mountaineers, and, like all races in such situations, have a less compact social development than do the races of the lowlands and plains.

Character and ethnic place of the Ossetes.

We may now glance for a moment at the geographical region over which the Iranic Aryans are distributed in their modern estate. A line drawn from the northwestern extremity of the Persian gulf into Syria, and thence to the Black sea, would mark the western limits of the dispersion. On the north, the range of the Caucasus, the Caspian, the northern boundary of Turkistan, and a line drawn from the Middle Oxus to lake Balkash, are the boundary. On the east, the general limit is the Indus, from its head-waters to the mouth; and on the south, the Indian ocean and the Persian gulf.

Geographical regions occupied by Iranic Aryans.

The great countries within these limits are Persia, Turkistan, Afghanistan, and Beluchistan. The races inhabiting these are independent in development and political form, but are all primarily peoples of a common origin. Around the borders, especially on the east, the admixture of foreign elements has been so considerable as to modify, and in some parts reverse, the original ethnic character. The largest foreign force which the Iranians of all these regions have suffered and the greatest modification in their national aspects have been produced by the impact of Mohammedanism. By this agency a great part of the original traditions and ceremonials of the Iranians, especially in Beluchistan, have been supplanted with Semitic institutional forms of a totally different nature.

Principal countries; modifying influence of Islam.

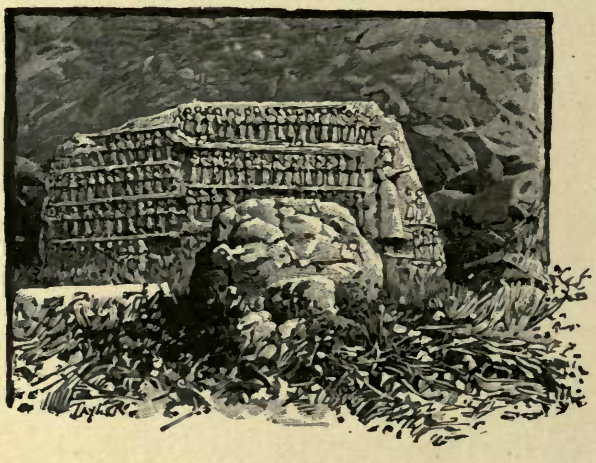
Into some districts of ancient Iran the lines of the primitive migration have carried the Brown, even the Black, races of antiquity, as in the case of the Brahoes in Northeastern Beluchistan, around Kelat, who are a people of Dravidian descent. All of these elements have left an ethnic detritus in the countries

Black and Brown admixture with the Iranians.

over which they have passed, and these elements have been absorbed by the Iranians, with a consequent change in personal character and tribal development.

After the Tajiks, who are the most widely distributed of the modern Iranians, the Afghans are next in breadth of dispersion and in numbers. They are estimated at about four million nine hundred thousand souls. This includes the inhabitants of Turkistan and of several adjacent provinces, who have a common ethnic character. The Beluchs number about half a million. They, most of all, have suffered from the intermixture of foreign races, and are most conformed to the character of the peoples of Hindustan.

Here, then, we shall conclude this cursory outline of the race which contends with the Indic Aryans for the rank of eldest among our ancestral Asiatic household. We have endeavored in the current chapter to revive, as far as possible, an image of the Iranians in the garb of their ancient life and in process of prehistoric evolution. From this we have proceeded to the consideration of those modern peoples who best represent the primitive stock. We shall now pass to their kinsmen in the valley of the Indus.



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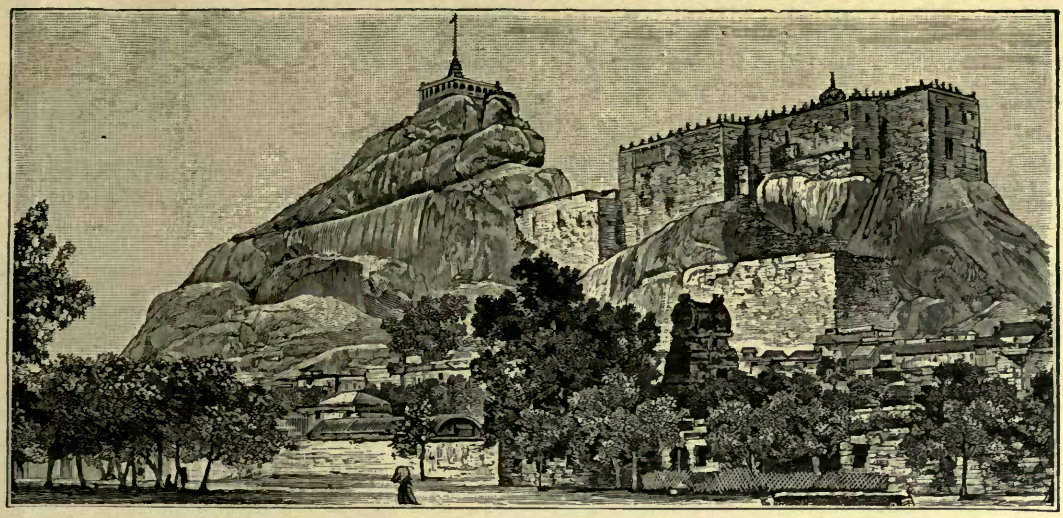
EAST ARYAN ART WORK. Indican Designs.



BOOK VI.—THE INDICANS.

CHAPTER XXXVII.—HOUSE PEOPLE OF ARYA.

IT is our purpose in the current chapter to present as much as may be gathered relative to one of the most interesting types in primitive civilization. This is the method of life, the structure of the household, the form of domestic and social economy adopted by the primitive Aryans of India. Since the building of a house for an abode, and the dwelling together therein of one man and one woman with their children in the method of that persistent and glorious fact called the family, constitute the leading feature, the form and substance, of the life of this far-off division of our own race, the caption employed for the present chapter will be the "House People of Arya."

Reason for the caption "House People of Arya."

Before entering upon the formal elucidation of the social life of this people, it is desirable to note the features of the country in which the great structure of Indian civilization was planned and developed. We must not depreciate the influence of physical nature upon man and his institutions. On the contrary, it is frankly conceded that the reäctionary effect of universal nature on the senses and intellections, and even on the emotions and passions of mankind, is one of the greatest elements in determining the course and character of human development.

Reäctions of nature on man and his institutions.

The country in which the house builders of ancient Arya were destined, most of all, to display their native dispositions and acquired activities, may well serve as an illustration of the potency, not to say domination, of nature over man.

The name INDIA is of recent origin. If we consult the native tongues of the East, we shall find no single word sufficiently comprehensive to define the country which we are now to consider. The name which in Sanskrit would most nearly describe the vast region which

Derivation and sense of the name India.

the modern nations call India, would be *Bhárata-varsha*, signifying the land, or kingdom, of Bhárata. The latter is the name of a legendary monarch of the Lunar dynasty, whose dominion, according to the Indic mythology and tradition, was perhaps as wide as the aggregate of countries now called by the general name of India.

VIEW IN SAPTA SINDHU.—The Mounchi-Bagh.—Drawn by G. Vuillier, from a photograph.

The name Hindustan has been frequently used by geographers to designate a region much broader than the limited country lying north of the Vindhya mountains; but such usage is no longer warranted. The name India is the smoothed and melodized Greek form of the Sanskrit *Sindhu*, or *Hindu*, meaning rivers; and this is the fundamental sense of the nomenclature. "Rivers" was the name which the primitive Aryan folk, coming into the upper valley from the table-lands of Iran and through the gateways of the Hindu-Kush, first gave to the country now known by the designation of Punjab, or Five Rivers. It is thought, however, that the very oldest designation given by the immigrating tribes to this region was Sapta Sindhu, or Seven Rivers, the two streams additional to the five of the Punjab being the Indus on the one side and the Saraswati on the other. At any rate, it was into this country of many rivers—so

The Sapta Sindhu of the Old Indicans.

many that they constituted the leading geographical feature, and impressed themselves first of all upon the imagination of the new folk from the north-west—that the Old Aryans came from their native seats at a time far more remote than we are able to measure by any existing system of chronology.

Origin and wanderings of the Indican immigrants.

These tribal immigrants came ultimately, as we shall see in another part of this work, out of ancient Bactria. For a long time after their departure from their primitive seats they maintained a nomadic, or rather a sort of pastoral, life on the broad plateaus of Iran. Perhaps the extent of their wanderings in this region will never be ascertained; but in process of time, as they made their way further and further to the east and south, they descended into the valley lands of the Upper Indus, and thence made their way down the Sapta Sindhu until the whole region between the Punjab and the sea was dominated by their influence.

Aryan mythology modified by the new environment.

Great were the climatic and other changes which they experienced in this migration; and it is easy to discover, by an examination of the ancient Indic and Persic mythologies and by a comparison of the one with the other, to how great an extent the mythology and tradition of the migratory Aryans was modified by their *débouchure* into the valleys of the east. The somewhat austere and simple ideas of Zoroastrianism immediately broke out into an inflected mythology, almost as variable in its forms and development as that of Greece; and this, no doubt, is traceable to the multifarious aspects and phenomena of nature as she exhibited herself in India, in contrast with her half-desert singularity on the Iranian table-lands and deserts.

Variability of climatic conditions in India.

India is a country very variable in its climatic conditions. The sky is broad and open, flecked with clouds, and invaded at intervals by storms. The heavens by night are, at least in the uplands, almost as blue and starry as those of Mesopotamia. The rainfall varies with the season and the district, being less than thirty inches in some of the drier parts, and much more than sixty inches in the lowlands near the sea. But first of all, something should be said of the general relations and geographical features of the vast region stretching from the borders of Afghanistan to the dependent mountain spurs which divide Assam from Burmah.

Extent and physical features of the country.

The extreme breadth of the country called India is about twelve hundred miles, and its extent from north to south fully fifteen hundred miles. India is the central of the three great peninsulas which drop from the backbone of Asia into the southern ocean. It is the Italy of Asia, but an Italy on a vaster and grander scale than that which depends from the Central Alps into the Mediterranean. The general shape of the Indian peninsula is a triangle, having its base set firmly against the tremendous buttresses of the Himalayas, and its apex extending far into the warm waters of the tropics. The southern point of the country reaches to the eighth parallel of north latitude; and its northern limit lies under parallel thirty-five. Within these vast boundaries there are three distinct geographical areas. First, the great uplifted mountain region, from the double ridges of the Himalayan summits to the hill-country at their foot. Second, the great river plains, embracing the larger part of the country, and bearing through various channels the streams of

the Punjab, of the Brahmaputra valley, and of the valley of the Ganges. Third, a peculiar, triangular table-land, called the Deccan, rising from the river plains just mentioned, and held in place between the Narbada and the Kistna rivers and the range of the Vindhya on the north.

Circumstances tending to isolate the Indican race.

It is not needed in a history of man to enter into the minute details of geography; but the general features of the country are of prime importance to the understanding of human development. It is necessary here to note, first of all, the inaccessible barrier of the Himalayas, shutting off India from connection with the rest of Asia. The average height of these mountains is at least nineteen thousand feet, and they have few gateways by which the country lying to the south may be approached. It is believed that the Indic Aryans came, in part at least, through these mountain fastnesses when they first reached the region of their future abode and development. If so, however, the migration must have been one of excessive toil and danger, and, the river valleys having once been reached, the mountain gates behind would seem to close, never to be reopened.

Thus we find that the Old Aryans of the East, having completed their migration, found themselves isolated from the rest of mankind and placed in a region well suited for race development. It is not needed, in this connection, to dwell upon the fact that these people were the last of the tribes to leave their old Bactrian abode, and that they had less of the migratory or roving disposition than any of their kinsfolk who removed from the same region, at earlier dates, into the plateau of Iran or the far European islands and peninsulas of the West.

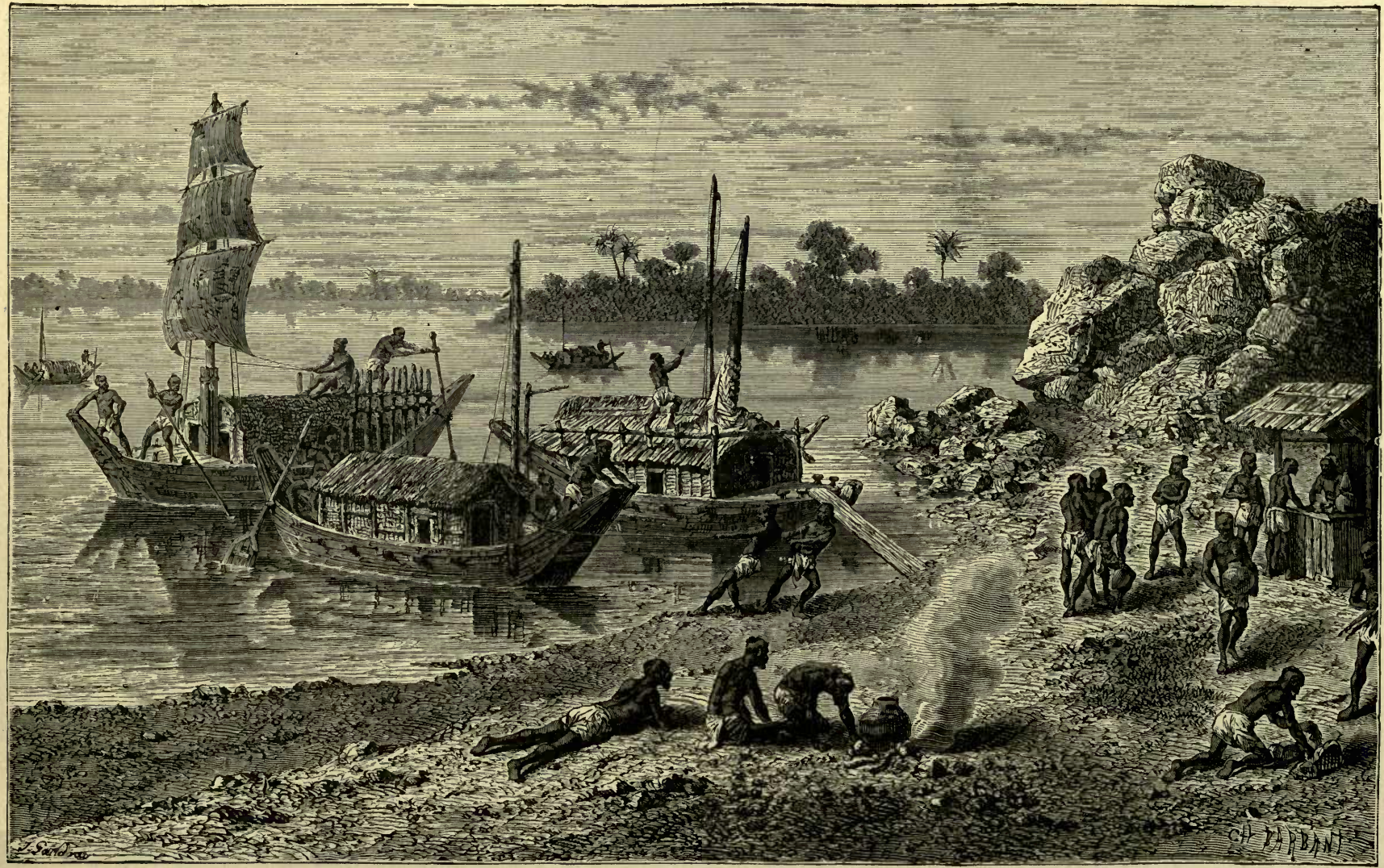
The Indicans become more localized than others.

The instinct of remaining—what the philosophers would call the *animus manendi*—was thus stronger with the Indic Aryans than with any other branch of the great family to which they belonged. They were more localized in their dispositions, and less adventurous than the kinspeople with whom they had been associated from the beginning. They now found themselves in beautiful river valleys and fertile uplands backed by mountains, well suited to promote the growth and expansion of those qualities which race instinct and innate preference had given them. They were alone among the peoples at a date much more than two thousand years before the Christian era. All the circumstances of their situation tended powerfully to develop a type of life peculiar in every feature.

It is not intended in this place to sketch the character of the Indic mind and philosophy, except in so far as the same may have appeared in its most rudimentary stages. The present chapter is devoted to the primitive condition of the race as it is revealed to us in its earliest aspects and conditions. Let us, then, proceed to note as much as may be authentically gathered of the primitive condition of these old peoples of the Indian valleys.

The immigrant Aryans find aborigines in the country.

On their reaching the regions which they were to inhabit, the Aryan folk from the northwest found already in the country an aboriginal people which they had to crowd out of their way. It is not known by how much aggression and force these aborigines were driven from their seats. Nor can it be well ascertained to what extent the future race was modified by the absorption of the primitive tribes of the country.



IN THE VALLEY OF THE GANGES.—River and Boat Scene.—Drawn by T. Gaildrau, from nature.

Those who have investigated the subject most closely differ in their estimates of the extent to which the future people of India were influenced in their blood and character by contact with the old tribes whom they overcame and dispossessed of their native seats. Perhaps the best judgment is that which assigns but a small modification on account of the absorption of characteristics from the primitive races. The situation, doubtless, was not very different, in some respects, from that which another Aryan people, after nearly four thousand years, discovered by their impact on the aboriginal races of the New World. The great adventurers from Western Europe, precipitating themselves upon the eastern coasts of North America, settling there and planting a new civilization, were not greatly modified, either at the beginning or at any subsequent period, by their contact with the Red men whom they displaced from the country. In some other regions conquest has given a different result. The Latin races, victorious over the provincial peoples who held Europe in the time of the Roman ascendency, assimilated freely with those whom they conquered and subdued. As already indicated, it is not now possible to determine with exactitude how much of the original human life of India was absorbed into the new Aryan life which came by migration and conquest.

The caption of the present chapter has already hinted at what may be regarded as the primary characteristic of the primitive Aryans of India. They were *the builders of houses*, the makers of homes, the organizers of families. This is the distinctive feature of that primitive life which we see afar in the valleys of the East, and also of the semitribal life which we behold in process of evolution among the early Medes and Persians, the Greeks, the Italic races, and even the Teutonic tribes of the north. They were all makers of houses—houses above ground, built from the material furnished by nature, and constructed with special reference to the permanent abode and comfort of a single household.

House-building instincts of the East Aryans.

It may well surprise us to reflect that the primitive houses of the Indian valley, built by a branch of our ancestral races long before Sanskrit was Sanskrit or Greek was Greek, had the same general form and substance and design as the houses built by the wanderers and pioneers of the New World in the seventeenth century of our era. There has always been a close sympathy between the man of Arya and the tree. He has always looked upon the tree as his friend. He has seen in it the possibility of protection and comfort and plenty. He has used it as the auxiliary of his development. Already, on his entrance into the Indian valleys, he knew how to create a house, to frame a structure out of the trunks of trees. The Old Medes had learned this lesson on the great plateau, and it is not a little instructive to note the fact that antiquarian research has not until the present day discovered a single Median structure left to us in ruin or tradition which was not made of wood.

Sympathy of Aryans with the tree; skill in wood structure.

Stone buildings and buildings of bricks were things somewhat repugnant to the first instincts of the Eastern Aryan races. These forms of structure came only by development and discipline, and belong to the æsthetic periods of national life. To fell the tree, to cut and square the trunk, to put it in place in

Name of the house, and ideas associated therewith.

four solid walls, and put a roof over the space for an abode, was the fundamental idea with the Aryan peoples. He called it his *house*, a word which is common to every branch of the great Aryan speech, from the oldest to the youngest. Nor are we able to discover a period of tribal life so remote that the house was not the tangible evidence and bottom fact. Of the exact forms which the structure assumed, we have no precise information; but the general nature of the primitive abodes of our own race, as distinguished from those of the Semites and Turanians, was as defined above, and its purpose was to constitute a fixed home for a man and a woman, with their offspring.

PRIMITIVE BUILDING OF THE INDUS VALLEY.—HOUSE IN THE KOULOU.
Drawn by G. Vuillier, from a photograph.

The man was called *pitar;* in Greek, *pater;* in Anglo-Saxon, *fæder;* that is, father. The father was the fundamental fact of the household. The word means the protector. And it is upon this idea that the whole structure of Aryan society, ancient and modern, is founded. The father protects his house and household. They are his. The idea is that of a nest. He is the roof above it. He defends it. His arm is bared for its protection, and his faculties are all vigilant lest harm come to his abode. He is the stem around which the whole structure is gathered and developed. He is the singular core of the household to which all the rest adheres and without which it falls instantly into disintegration and ruin. His life is the constant barrier between it and all harm. His valor and strength are the safeguards and guaranty of his own place, which stands apart from the rest and holds his treasures. In all the tribes which have sprung from that original Bactrian fountain, bubbling up with human fecundity in remote prehistoric ages, *fatherhood* and *protection* have been inseparable synonyms.

Nature of the household; the paternal name.

As a necessary adjunct to this central fact called the father in the Aryan household, was the institution of monogamy. Single marriage was the rule from the beginning. The union of one man with one woman, perpetually devoted the one to the other, was the fundamental concept of the creative relation and of the outward fact called the home. It appears, moreover, that this union among the Aryan peoples has always been based on the sentiment of affection.

The fact and sentiment of single marriage.

A preference, loving and tender, has always existed, at least a preference of the man for the woman. It is doubtful, indeed, if the preference of the woman for the man has ever been wholly ignored in any Aryan tribe. It is true that the idea of ownership, the belief and practice that the man was not only the possessor but the *owner* of the woman, has prevailed among many of even the leading peoples of our race. But a close study of primitive conditions will show that even at the earliest emergence from barbarism some—even much—deference was given to the sentiments and instincts of the woman.

However this may be, the monogamic relation is certain and definite. In strong contradistinction to the polygamous practices of the Semitic races and the polyandry of many of the barbarian families of mankind, the single marriage of the Aryan household stands preëminent. Further on we shall see that this principle of monogamy was so strong among the Greeks and Romans as to be by them communicated and forced upon the prevalent social, political, and religious systems of the world.

The Aryan household preeminently monogamic.

MODERN HOUSES OF THE SAPTA SINDHU.—VILLAGE IN THE KOULOU.—Drawn by G. Vuillier, from a photograph.

In the valley of the Indus the primitive Aryan household was organized on these principles. A house was built. A father declared himself. He took on woman in marriage. He became her

Institution of the family; office of the mother.

protector and the defender of the house where she dwelt and where he dwelt with her. When the child was born, his fatherhood was emphasized. He was the protector also of the child—of the children. They grew around him. He was the center of the primitive home, its defender from harm, and the fundamental fact of its existence. And this brings us to consider the mother in *her* office and character as she is revealed to us in the Aryan dawn.

The mother in Arya was the *producer*, that is, the producer of life. She was the genetrix, the wellspring. When the name of mother (Sanskrit *mâtâ*) was first given her, she was thought of as the blessed origin of being, the bearer of the new living form which the father was to acknowledge and protect.[1] As to her own being, it was wedded to that of the man. She lost her name and her family relationship by her union with the man. She was taken out of the household to which she belonged in girlhood and transferred to the man. To this extent she became his. At least, she was *of him*, and her identity was henceforth merged with his in the household which they had founded. But the household took its origin in him, bore his name, and was under his protection and sovereignty.

The son and the daughter; significance of their names.

We are able, by means of linguistic study, to penetrate the inner life of the primitive house of Arya, and to discover its methods. The names given to the son and the daughter indicate, as clearly as can be, the offices which they held in the family. The ideas upon which the organizations depended are clearly shown by the words employed to define the household relations. As for the son, he was called *sunu*, meaning the begotten, and the thought was that as the begotten of his father he was to be his successor and representative. He was named accordingly; and we are thus able to see at the very foundation of Aryan life the notion which the primitive father had of his male offspring.

The daughter was named on a different principle. They called her at the first *duhitar*, a term of endearment, significant in its first intent of the tenderness with which the girl-child was regarded. Her place in the household was affectional. She was the darling from her birth, and this relation of loving tenderness she continued to bear in the family until her transplanting out of it to the side of her husband. But while she continued to be duhitar, the daughter, she also, in maidenhood, took on another name or names significant of her place and duty. Instead of being called duhitar, she was nicknamed *milkmaid*, and by this simple fact we are let into a section of the daily life of the household. It was her duty, on arriving at mature maidenhood, to milk the cows and goats, and her duty in this respect was so clearly defined as to warrant her nickname milkmaid. By this title she was called without disparagement, and her original office has been carried with the fragments of speech into several modern languages.

Predominance of the agricultural instinct.

If we scrutinize more closely the method of life pursued at the beginning by the Indic Aryans, we shall find them to be a people of the soil. They lived from the resources of the earth produced by cultivation. In these

[1] The fundamental unity of the idea of mother among all the Aryan peoples is shown by the identity of the word in the different languages—thus: Sanskrit, *mâtâ*; Old Persic, *mâtâ*; Greek, *mêtêr*; Latin, *mater*; Old Slav, *mati*; O. H. Ger., *muotar*; Gaelic, *mathair*, etc., etc.

migrating tribes the agricultural impulse was dominant from the first. They were peculiarly a people of ground-

HOUSE PEOPLE OF ARYA—THE DUHITAR.

culture. They plowed the glebe. It was their vocation to plant seeds and develop the growing stalk to maturity and fruitage. This peculiarity of the primitive life of the Aryans is so strongly marked as to have left its own demonstration and history in the languages spoken by the different races of this stock. Nor can it fail of interest, even to the unlearned reader, to note the proof and illustration of the agricultural aspect of Aryan life by an examination of that group of words which exhibit the fact most strikingly.

The word Aryan is from the Sanskrit *Arya*, meaning "noble." It signifies the nobility of the agricultural caste in ancient India. The plowmen were the noble people, and were so called by themselves from the beginning. The root AR means to plow, and this signification is traceable in nearly every dialect of Aryan speech. In Latin *ar*-are was to plow. In Greek *ar*-oun had the same meaning. Even in Old English we have the expression to *ear* the ground, mean-

Meaning and application of the word Arya.

ing to plow. In the forty-fifth chapter of Genesis occurs the expression, "There shall neither be *ear*ing nor harvest." This signifies, "There shall be neither *plowing* nor harvest time." Ancient geographical names in all parts of the Aryan world have preserved the traces of this word. The old name of Thrace was *Ar*-ia. The ancient name of the Median and Persian plateau was *Ir*-an, meaning the land of the Aryans. The name of *Ire*-land, formerly written *Eire*-land, preserves the same root, and the poetical name *Er*-in, sometimes supposed to mean the land of the west, is only the same word, and signifies the land of the plow. Aye, the very word *ear*-th is doubtless the same, preserving in its spelling and pronunciation the unmistakable evidence of the primitive vocation of the Aryan race. The names of men in various parts of the world have carried forward the same noble tradition; and that great German leader with whom Julius Cæsar contended for the mastery of Europe was called *Ar*-iovistus. All these facts prove beyond doubt that the vocation of this great branch of the human family was agricultural, and this at a period before the breakup of the ancient tribes in the original seats of Bactria. They were the people of the plow long before the Hellenes were known to history or the ancient Medes had appeared as a power on the Iranian plains.

HOUSE PEOPLE OF ARYA—THE TILLERS OF THE SOIL.

The general character of the early life of man is largely discoverable by his relations with the other animals. From his appearance on the earth, be the

mode and the time of that appearance whatever it may, he has been in close affiliation with the lower orders of being. The distinction between wild and domestic animals is doubtless fictitious. All animals at the first were wild. Some species have, in process of time, been tamed by the superior wit and contrivance of man; and the creatures thus domesticated have acquired the instinct of docility. The peculiarities of the Old Aryan life of India are again revealed in the character of the animals which they succeeded in subduing. They are those peculiar to the agricultural life. The horse was their servant long before their migration from the Bactrian uplands. Tradition has preserved even into the dawn of authentic history the story of the horses of the Medes and Persians. The Indic Aryans were equally the masters of this noble animal, but with them he was bred and reared rather for the service of the field and the household than for swiftness in flight or the charge of battle. The horse in the Indian valleys partook in course of time of the mild and docile qualities of the people, and obeyed somewhat the influences of his environment.

Relations of the Indicans with tame and wild beasts.

So also of the cattle and the sheep. Both were domesticated and drawn around the Aryan house. From the earliest days of the migration wild cattle still existed in the uplands of Persia and perhaps in the mountain countries of the north; but the kine of the valleys were domesticated, and were used for food and service more than fifteen hundred years before the conquest of Alexander. Likewise, the goat was among the tamed animals of the primitive Indians. He was eaten as to his flesh, and from the ewes was derived the principal supply of milk, with its secondary products of butter and cheese. So also was the dog—but not the cat—the constant companion of these people. Indeed, the whole life of the Aryan household was of the strictly agricultural type; and it may well surprise us to find represented in the daily curriculum of the oldest tribes of our race so many of the features, the methods, and characteristics of the modern family.

The agricultural life indicated by the domestic animals.

Strangely enough, it does not appear that the ancient Aryans of India were much acquainted with the wild beasts of the woods. At any rate, such acquaintance as they had seems to have been gained after the departure from their kinsfolk of the highlands and their coming into the Indian valleys. These facts we know again from the testimony of language. The names of the wild beasts are generally different in the different Aryan languages. If the bear, for instance, or the wolf had been familiar to the tribes before the migration from their original seats, they would have given him a name, and that name would have been common in the various dialects arising from the common source. So also of the other fierce beasts of the woods. But we find that the wild creatures have each a specific name in the different Aryan tongues, from which the nonacquaintance of the primitive folk with such beasts is clearly inferred.

Names of wild beasts different in various Aryan languages.

If we glance at the implements and utensils of the Old Aryan household, we shall find another illustration of the peaceful agricultural life which they led. The various implements of tillage are named in common by the different Aryan folk who used them. The plow, the rake, and the hoe, the iron ax and sickle, and many other of the imple-

Names of implements also show the manner of life.

ments of husbandry were manifestly in use by the immigrants who peopled ancient India. But here again we find a different result when we look at the names of the implements of the chase and of war. The name of the bow and arrow, the spear, the lance, and the sword are different in the different dialects which sprang from the common source; and we are able by such means to discover that hunting and the still at eventide. It is unmistakably true that the leading features of the primitive Aryan home of India had an outline of identity with those of Greece and Italy, and even of the Teutonic fastnesses of the north and the oak woods of Britain. Unto this day many words still live in India and in England that had a common birth and common meaning before the separation of the ancient tribes from the Bactrian homestead, and these words

HOUSE PEOPLE OF ARYA—THE AGRICULTURAL LIFE.

more exciting vocations of war were phases of life comparatively unknown to the primitive Aryans, and only superimposed upon their ancient agricultural life at a later date and under foreign influences.

War and the chase were not the native pursuits of these peaceable people; and the very nomenclature of their household and garden utensils is sufficient of itself to establish their character as men of the field by day and the hearthstone

Indications of a peaceable and domestic race character.

and forms of speech bear unmistakable evidence of the common primitive life which all these tribes inherited from a common ancestry. The name for house is the same in all. So also the names for father and mother, for son and daughter, for dog and cow, for heart and tears, for ax and tree, for plow and doorway—all are common in their origin and meaning in the whole group of Indo-European languages. And thus are we able, by linguistic research and careful comparison, to draw from the

prehistoric shadows a tolerably accurate outline of that primitive life which was led by the Aryans of India before the Veda was sung, and even by their own ancestral tribes long before the Zend-Avesta had taken form in the minds of the Iranian bards and philosophers.

Synopsis of the aspects of life in Old India.

Thus we see, in a very remote prehistoric age, certainly as much as two thousand years before our era, the incoming of certain migratory tribes into the great country which we call India. We see them settling there and developing according to the laws of their own instinct and the influences of their environment. We see them building houses and organizing families on the basis of monogamy. We see them localized in their abodes and in close relation with the soil, from which they derived their subsistence by means of regular cultivation. We see them devoting themselves to the pursuits of peace; employing the domestic animals and using the implements of husbandry, driving the oxen to the plow and bearing the milk pail from the goatfold at evening. We see them but little acquainted with the chase and little disposed to the dangers and excitements of war, a peculiar people, given to peace and dreading the hazards and alarms of conflict and battle. We see them following from generation to generation, even from century to century, the same primitive methods of life until, in the process of time and with the rise of more aggressive and adventurous peoples in other parts of Asia, their national life is at last thrust into the faint dawn of authentic history. Then it is that the priest is heard chanting the songs of the Veda, and the old philosopher of Arya begins to teach his mystic beliefs to dreaming followers in the valleys of the East. When we arrive at this juncture in the history of the Indic races, it will be time for us to pass from the purely primitive aspect of Aryan life in India to consider its tribal and historical relations—as will be done in the following chapters.

CHAPTER XXXVIII.—RELIGION.

N the entrance of the Old Aryans into the Indian valleys all the ethnic harmonies of the race were softened into a minor key. There was a loss of intellectual force, with a gain of imagination; a loss of bodily energy, with a gain of activity; a loss of adventure, with a gain of dreaming. Every element of the originally robust Aryan character, as it had shown itself through all the stages of drifting from the Bactrian homestead through the mountain passes into the Punjab, was toned down and soon forced, by a new discipline, to vibrate to a softer chant. Every force of nature conspired by its reäction on the faculties of man to abridge freedom, cool passion, assuage tribal heat, and diffuse a calmer mood.

General effect of the migration of the East Aryans into India.

We come now to consider the old life of India, always an obscure problem in the history of mankind. We have already considered those ancient migratory movements which carried down the peoples of our ancestral race, by successive waves into the Punjab, and thence

BOATING BY MOONLIGHT ON THE INDUS.—Drawn by G. Vuillier from a photograph by Burke.

southward and eastward to the ocean and the mountains. We have even noted some of the original conditions which surrounded the immigrants and conduced to the formation of a new race character. The attentive reader is by this time tolerably informed with respect to the ethnic inheritance which the Aryans brought with them into India; of their dispositions and peculiarities, and the beginnings of the institutional form which they carried along on their way from the highlands of Iran into the lowlands of Sapta Sindhu. It shall now be our object to take up the transplanted life of the Old Aryans, and to note its evolution into new forms peculiar to the East.

We are here on the threshold of Brahmanism. Perhaps it will be well first of all to note the peculiarities of this ancient faith, and especially its divergence from the system of Zoroaster. The term is derived from the Brahmans, the sacerdotal caste of the Hindu family, who have, from the most ancient times, been the custodians of the national faith, preserving its dogmas and directing its ceremonial. In their hands—such is their antiquity and such their influence over the destinies of Indian civilization—both the linguistic and the religious development of the Indian race have been determined, and it is interesting to note the almost perfect parallelism of the changes from the Old Aryan tongue to the modern languages of Hindustan, and the corresponding inflections of the old religious beliefs into the forms and ceremonials of the existing races of India.

Indican religious system developed by the Brahmans.

The doctrines of Brahmanism are summed up and contained in a body of sacred writings, under the collective name of the Veda. The word signifies "knowledge," or "revelation." Perhaps the older portions thereof are the oldest written compositions now in possession of the human race, unless we should except certain parts of the Chinese literature, concerning the antiquity of which the Western peoples are not well informed.

Nature and extent of the Vedas.

The Veda consists of four parts, or collections of sacred texts, called Sanhitas, or Mantras. The texts include not only expositions of doctrine and revelations of the gods, but also hymns and incantations and prayers and sacrificial forms peculiar to the national religion. The first major division of the whole work is known as the *Rich*-Veda, commonly written Rig-Veda; the second is the *Saman*-Veda, or Sama-Veda; the third is the *Yajush*-Veda, written Yajur-Veda; and the fourth, the *Atharvan*-Veda, or Atharva-Veda. Each of these greater parts has its peculiarities, and the whole covers a vast epoch as it relates to the time of composition.

In addition to the sacred texts proper, there is a large mass of prose writings attached thereto called the Brahmanas. The subject-matter of these relates to the ceremonial application of the sacred texts, the proper method of conducting the rites, and other practical and expository matters. There are two other kinds of commentaries or appendages to the Vedas, called the Aranyakas and the Upanishads, the former of which are analogous in subject to the Brahmanas, being in the nature of a comment and explanation upon the sense and proper usage of the sacred books. The Upanishads, however, are more philosophical in their character. They contain the great body of speculations on the problems of life and of destiny, particularly

Additional writings connected with the sacred text.

that part of philosophy which relates to the universe and its religion. These commentaries and expositional parts of the Hindic Bible come down to a comparatively recent date, from which circumstance the sacred language of India may be studied entirely from the religious texts. Nearly every inflection and linguistic development which has taken place from the most ancient Sanskrit to Hindustani may be gathered and understood from an examination of the Vedas, with their accompanying gloss and commentaries.

It is the Rig-Veda which constitutes the essence of the whole. It corresponds with the Gâthâs of the Avesta, containing the hymns and other lyrical effusions of the earliest Aryan settlers in India. It is clear, however, that these most ancient songs differ greatly among themselves in date of composition. Some of them represent the language in its oldest aspect, and others are of a later date; but all are ancient, and belong to that primitive period of religious and linguistic history in which the thought of the ancestral race was still in native efflorescence, freeing itself from the bosom of man in ejaculatory expressions, apostrophes, and hymns of praise to the gods. Quite unlike the Rig-Veda are the three other divisions of the sacred books. The Sama-Veda and Atharva-Veda are ritualistic in character. They either explain, illustrate, or apply the doctrines of the older hymns, or repeat them in more modern phraseology.

Essence of the system contained in the Rig-Veda.

Much has already been said relative to the bottom character of the Old Aryan worship. It was based upon a reverential regard for the powers of nature. The grand and striking phenomena of the physical universe struck upon the consciousness of this early race with peculiar power, and the heart of the people burst out in adoration and praise. Doubtless in its very earliest aspect the religious system thus produced was merely a nature worship, having for its objective realities the sublime aspects and processes of the material world.

Vedaism based on the adoration of nature.

Generally, the vision of this early people was lifted to the air and sky. Atmospheric phenomena particularly affected the senses and attracted the reverence of the Old Indians. Higher still were the heavenly bodies. The effulgence of the sun poured down upon a sensitive race and warmed them into gratitude and devotion. There was in a very early age a division of the powers of the universe similar to that discerned and developed by the Greeks. There were powers of the earth, powers of the air, and powers of heaven. For a long time the polytheistic aspect of the system was maintained, and it is not until we reach the tenth book of the Rig-Veda that we find an effort on the part of the worshiper to elevate one particular deity to the rank of an omnipotent God.

Natural reverence for the air and the heavenly bodies.

We have already called attention to the mode by which, in the worship of the powers of nature, the mind, ever in process of expansion, labors to separate the force behind the phenomenon from the phenomenon itself. This happened in the case of the Indians. Their system was elevated from the merely physical aspects of the universe to the invisible powers which control and direct. These were henceforth worshiped. Names were given to them, and a hierarchy was established, having a supreme head in the sky god called Dyaus Pitar, or Heaven Father. We thus see in the extreme East a religious evolution which

The mind seeks to separate matter from spirit.

reached the same result as that which was subsequently attained, without historical contact, by the kindred Aryans of the Græco-Italic race. Dyaus Pitar is the same as the Greek Zeus and the Roman Jove.

The prayerful element in the Vedic worship.

The system of worship adopted by the Indic Aryans was noted for what may be called its *prayerful* character. Its essence was invocation, and even the gloss and commentary, so abundantly elaborated in the books accompanying the Veda, are nearly all devoted to the proper exposition and form of prayer. The whole system presents man in a reverential attitude toward the gods, pouring out his devotions, sometimes in praise and what may be narrowly defined as worship; but generally the substance of the devotional act was an appeal to the powers above, a prayer for benefit, for grace, for wisdom. The word *Brahma* is said to signify "devotion," or "prayer."

Development of worship and use of sacrifices.

It must not be understood that this simple and essential element in the theology of India was not subject to development, in the hands of the priests, into a vast and incomprehensible formulary. On the contrary, the inflection of ceremony was never carried to a higher degree than by the priests of the Old Indic faith. Not only was the form of the prayer, its subject, and its method to be carefully defined, but the philosophical concepts of the worshiper must be regulated and mingled with his devotion, in order that a true religion might be illustrated in his life.

The second idea was that of the efficacy of sacrifices. The earnest prayer properly expressed could hardly fail to bring to the worshiper an answer from the gods, but the pleasure of the latter was enhanced and their purposes toward men made more auspicious by the giving of gifts on the altar. Thus a sacrificial system was demanded to supplement the system of prayers; and for the conduct of the ceremonies and sacrifices orders of priests became necessary, who, by the multiplication of their own functions and dignities, increased the number and reputation of their caste. Professor Max Müller has enumerated four classes of priests required in the conduct of solemn sacrifices:

1. The officiating priests, manual laborers, and acolytes, who have chiefly to prepare the sacrificial ground, to dress the altar, slay the victims, and pour out the libations.

2. The choristers, who chant the sacred hymns.

3. The reciters, or readers, who repeat certain hymns.

4. The overseers, or bishops, who watch and superintend the proceedings of the other priests, and ought to be familiar with all the Vedas.

Extracts from the Veda; hymn to Indra.

It is the purpose in the present work to make as few excerpts as possible from existing writings. It has been the plan rather to summarize and to place in the best light the *substance* of such documents as would most demand attention in the course of an ethnic history. At this point, however, it seems fitting to present some examples of the Vedic hymns in English. Only so much will be given as may familiarize the reader with the phraseology of these ancient songs and with the worshipful spirit in which they were chanted, in the faint dawn of history, by the old bards of India. The selections are made from Müller's translation of the Vedas. The first is from the fifty-third chapter of the first book of the Rig-Veda.

I. Hymn to Indra.

1. Keep silence well! We offer praises to the great Indra in the house of the sacrificer. Does he find treasure for those who are like sleepers? Mean praise is not valued among the munificent.

SAKYA MUNI.

2. Thou art the giver of horses, Indra, thou art the giver of cows, the giver of corn, the strong lord of wealth; the old guide of man, disappointing no desires, a friend of friends; to him we address this song.

3. O powerful Indra, achiever of many works, most brilliant god — all this wealth around here is known to be thine alone: take from it conqueror, bring it hither! do not stint the desire of the worshiper who longs for thee!

4. On these days thou art gracious, and on these nights, keeping off the enemy from our cows and from our stud. Tearing the fiend night after night with the help of Indra, let us rejoice in food, freed from haters.

5. Let us rejoice, Indra, in treasure and food, in wealth of manifold delight and splendor. Let us rejoice in the blessing of the gods, which gives us the strength of offspring, gives us cows first, and horses.

6. These draughts inspired thee, O lord of the brave! these were vigor, these libations in battles, when for the sake of the poet, the sacrificer, thou struckest down irresistibly ten thousands of enemies.

In the following hymn the invocation is to Agni, the god of fire. As we have seen, this deity was perhaps the most lineal descendant of the ancient Aryan Mazdâo, being the earthly representative of the sun, shining on the hearthstone and from the altar place. Agni was regarded as the guardian of the house and the messenger of intercourse between gods and men, having thus the character of the Hermes of the Greeks. Since flame was the devouring element in the offering of sacrifices, Agni was regarded as the divinity of the altar.

Worship of Agni; hymn in his praise.

The following invocation is from the sixth chapter of the second book of the Rig-Veda.

II. Hymn to Agni.

1. Agni, accept this log which I offer to thee, accept this my service; listen well to these my songs.

2. With this log, O Agni, may we worship thee, thou son of strength, conqueror of horses! and with this hymn, thou highborn!

3. May we thy servants serve thee with songs, O granter of riches, thou who lovest songs and delightest in riches.

4. Thou lord of wealth and giver of wealth, be thou wise and powerful; drive away from us the enemies!

5. He gives us rain from heaven, he gives us inviolable strength, he gives us food a thousandfold.

6. Youngest of the gods, their messenger, their invoker, most deserving of worship, come, at our praise, to him who worships thee and longs for thy help.

7. For thou, O sage, goest wisely between these two creations [heaven and earth, gods and men], like a friendly messenger between two hamlets.

8. Thou art wise, and thou hast been pleased; perform thou, intelligent Agni, the sacrifice without interruption; sit down on this sacred grass!

The worship of storm was a peculiar feature of the religion of Old Arya. It can not be said that this phase of the original cult reappeared in the mythology of the Greeks and Romans, at least in a distinct form, but storm worship was a conspicuous element in the devotions of India, as it had been, to a certain extent, among the Iranians. The storm gods were

GOD OF FIRE.

known as the Maruts, and the following hymn, from the thirty-ninth chapter of the first book of the Rig-Veda, will sufficiently illustrate the nature of the adoration which was paid to them:

Cult of the storm; hymn to the Maruts.

III. HYMN TO THE MARUTS.

1. When you thus from afar cast forward your measure, like a blast of fire, through whose wisdom is it, through whose design? To whom do ye go, to whom, ye shakers?

2. May your weapons be firm to attack, strong also to withstand! May yours be the more glorious strength, not that of the deceitful mortal!

3. When you overthrow what is firm, O ye men, and whirl about what is heavy, ye pass through the trees of the earth, through the clefts of the rocks.

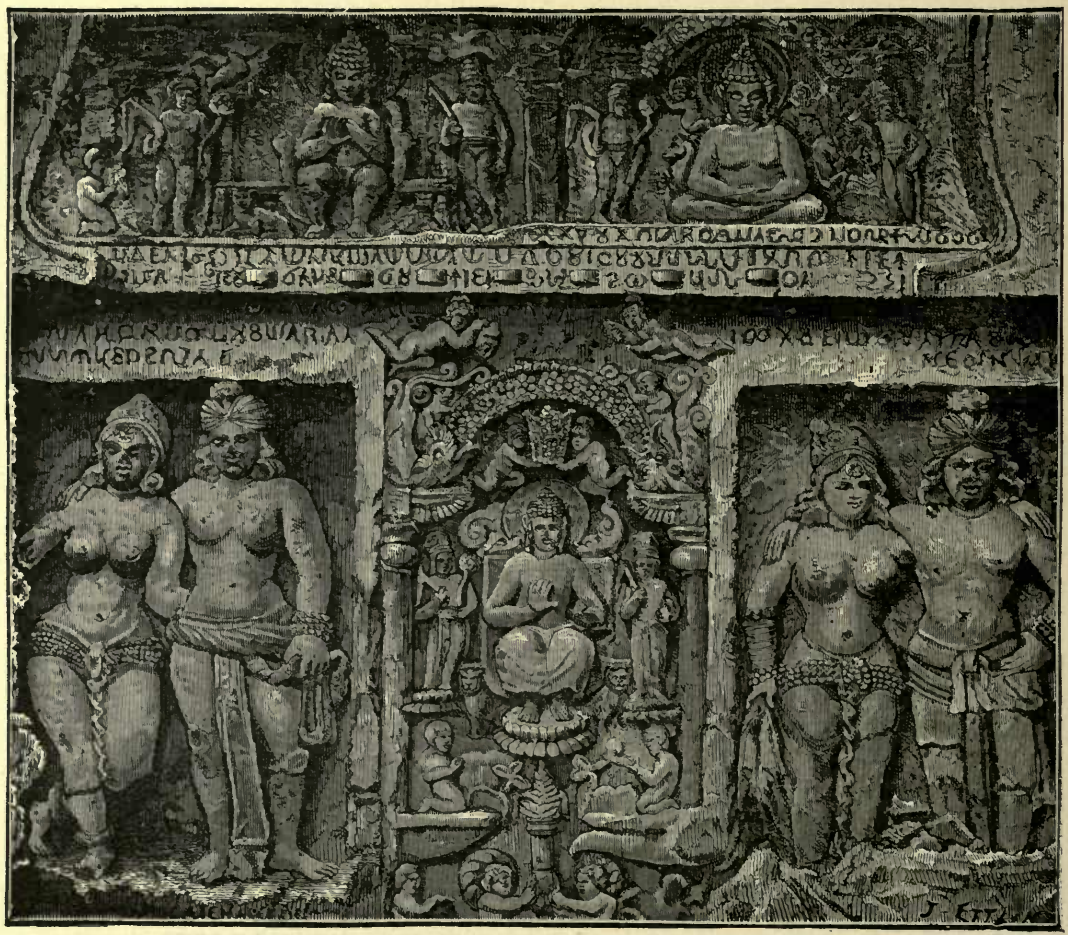
4. No real foe of yours is known in heaven or in earth, ye devourer of enemies! May strength be yours, together with your race, O Rudras, to defy even now.

5. They make the rocks to tremble, they tear asunder the kings of the forest. Come on, Maruts; like madmen, ye gods, with your whole tribe.

10. Bounteous givers, ye possess whole strength, whole power, ye shakers. Send, O Maruts, against the proud enemy of the poets, an enemy, like an arrow.

One of the tenderest aspects of the natural world is the dawn of the day. This phenomenon appears to have impressed itself upon the senses of all early races of men. In the Greek mythology Daphne, the "dawn," was chased around the earth by her lover Apollo. In the Indian system the myth reäppeared under the name of Ushas, first adored as a visible aspect of nature, and afterwards elevated into a

Myth of the dawn; hymn to Ushas.



SCULPTURES FROM A PORCH AT KARLI.—Drawn by H. Catenacci, after Grandsire.

living being and impersonated as one of the gods. From the seventy-seventh chapter of the seventh book of the Rig-Veda the following hymn to Ushas is presented:

IV. HYMN TO USHAS.

1. She shines upon us, like a young wife, rousing every living being to go to his work. When the fire had to be kindled by men, she made the light by striking down darkness.

2. She rose up, spreading far and wide, and moving everywhere. She grew in brightness, wearing her brilliant garment. The mother of the cows [the mornings], the leader of the days, she shone gold-colored, lovely to behold.

3. She, the fortunate, who brings the eye of the gods, who leads the white and lovely steed [of the sun], the dawn was seen revealed by her rays, with brilliant treasures, following everyone.

4. Thou art a blessing where thou art near; drive far away the unfriendly; make the pasture wide, give us safety! Scatter the enemy, bring riches! Raise up wealth to the worshiper, thou mighty dawn.

5. Shine for us with thy best rays, thou bright dawn, thou who lengthenest our life, thou the love of all, who givest us food, who givest us wealth in cows, horses, and chariots.

6. Thou daughter of the sky, thou highborn dawn, whom the Vasishthas magnify with songs, give us riches high and wide: all ye gods protect us always with your blessing.

We will conclude these extracts from the oldest division of the Indic scriptures by presenting two hymns to Varuna, from the eighty-sixth and eighty-ninth chapters of the seventh book of the Rig-Veda. This deity was the god of the waters, or of the Western world, as it was understood in the Hindu myth. In the philosophical imagery of the Brahmans, Varuna was represented as a four-armed man, riding on a fabulous sea monster, bearing in his right hand a rope and in his left a bludgeon:

Theory of Varuna, and his hymns.

V. HYMN TO VARUNA.

1. Let me not yet, O Varuna, enter into the house of clay; have mercy, almighty, have mercy!

2. If I go along trembling, like a cloud driven by the wind; have mercy, almighty, have mercy!

3. Through want of strength, thou strong and bright god, have I gone wrong; have mercy, almighty, have mercy!

4. Thirst came upon the worshiper, though he stood in the midst of the waters; have mercy, almighty, have mercy!

5. Whenever we men, O Varuna, commit an offense before the heavenly host, whenever we break the law through thoughtlessness, punish us not, O god, for that offense.

Second hymn:

1. Wise and mighty are the works of him who stemmed asunder the wide firmaments. He lifted on high the bright and glorious heaven; he stretched out apart the starry sky and the earth.

2. Do I say this to my own self? How can I get unto Varuna? Will he accept my offering without displeasure? When shall I, with a quiet mind, see him propitiated?

3. I ask, O Varuna, wishing to know this my sin. I go to ask the wise. The sages all tell me the same: Varuna it is who is angry with thee.

4. Was it an old sin, O Varuna, that thou wishest to destroy thy friend, who always praises thee? Tell me, thou unconquerable lord, and I will quickly turn to thee with praise, freed from sin.

5. Absolve us from the sins of our fathers, and from those which we committed with our own bodies. Release Vasishtha, O king, like a thief who has feasted on stolen oxen; release him like a calf from the rope.

6. It was not our own doing, O Varuna, it was necessity, an intoxicating draught, passion, dice, thoughtlessness. The old is there to mislead the young; even sleep brings unrighteousness.

7. Let me without sin give satisfaction to the angry god, like a slave to his bounteous lord. The lord god enlightened the foolish; he, the wisest, leads his worshiper to wealth.

8. O lord Varuna, may this song go well to thy heart! May we prosper in keeping and acquiring! Protect us, O gods, always with your blessings!

The foregoing examples will be sufficient to illustrate the spirit in which some of the earliest apostrophes of mankind to the immortal gods were uttered. It is denied by the translator that the system of religion whose fundamental ideas are expressed in these prayers is polytheistic. He also would deny that they are an expression of monotheism.

Muller's views respecting Vedaism; later Vedic hymns.

As a term definitive of their real nature, he suggests *Kathenotheism*, which would imply that the deities of the Indic race were the personified attributes of a single godhead, that is, several under one. This, however, is to enter into the niceties and hair-splittings of that theological and philosophical controversy, the refinements of which, even when most carefully expressed, have proved of but little advantage to the human race. It will, however, be a fitting conclusion to these extracts from the Indic Bible to repeat some verses from another part of the same translation. They correspond to the Hebrew Book of Genesis rather than to the Psalms, as do the Vedic hymns already quoted:

RIG-VEDA, BOOK X, CHAPTER 121.

1. In the beginning there arose the golden Child—he was the one born lord of all that is. He established the earth and this sky. Who is the God to whom we shall offer our sacrifice?

2. He who gives life, he who gives strength; whose command all the bright gods revere; whose shadow is immortality, whose shadow is death. Who is the God to whom we shall offer our sacrifice?

3. He who through his power is the one king of the breathing and awakening world; he who governs all, man and beast. Who is the God to whom we shall offer our sacrifice?

4. He whose greatness these snowy mountains, whose greatness the sea proclaims, with the distant river; he whose these regions are, as it were, his two arms. Who is the God to whom we shall offer our sacrifice?

5. He through whom the sky is bright and the earth firm; he through whom the heaven was established, nay, the highest heaven; he who measured out the light in the air. Who is the God to whom we shall offer our sacrifice?

6. He to whom heaven and earth, standing firm by his will, look up, trembling inwardly; he over whom the rising sun shines forth. Who is the God to whom we shall offer our sacrifice?

7. Wherever the mighty water clouds went, where they placed the seed, and lit the fire, thence arose he who is the sole life of the bright gods. Who is the God to whom we shall offer our sacrifice?

8. He who by his might looked even over the water clouds, the clouds which gave strength and lit the sacrifice; he who alone is God above all gods. Who is the God to whom we shall offer our sacrifice?

9. May he not destroy us, he the creator of the earth, or He, the righteous, who created the heavens; he also created the bright and mighty waters. Who is the God to whom we shall offer our sacrifice?

Space would fail to extend these quotations from the ancient religious writings of the Indic Aryans. It can not be known to what extent the same were originated after the incoming of the immigrant peoples into India, or to what extent they had already been formulated at an earlier period. As frequently happens in the case of religions, the old system of nature worship, spiritualized and elevated in the hands of the primitive seers of the East, soon fell into degeneration in the hands of the Brahmans. A volume could not contain an account of the changed and changing aspects through which Brahmanism passed from its old form, as expressed in the Vedic hymns, to its later inflections and incomprehensible refinements, as elaborated by the Brahmanical priesthood. It became a mythology rather than a religion. The old spiritual concepts gave place to vague and even ridiculous myths, irrational in their subject-matter and preposterous in their application. The old religion grew into the most enormous body of ceremonials and formalities which were ever, perhaps, devised by the ingenuity of a priestly order.

Brahmanism becomes an incomprehensible mythology.

We have accepted Max Müller's view that the original faith of India was Kathenotheism,[1] that is, a system of many

[1] The word kathenotheism is derived from the Greek *kata*, "under," *henos*, "one," and *theos*, "god;" that is, a pantheon of many gods under one supreme godhead.

deities under one, the latter being the supreme being of the universe, and the former his impersonated attributes. In the hands of the Brahmans, this concept finally took the form of a godhead, composed of a triune person, or persons, called the Trimurti, the first of whom was Brahma, the creator ; the second, Vishnu, the preserver; and the third, Siva, the destroyer of all things. This trinity was represented, not as a single person, as in the Christian theology but as three deities, in intimate union of relationship. They presided gloomily and in a fatalistic sense over the destinies of human life.

Meaning of Kathenotheism; nature of the Trimurti.

While the concept of Brahma as the supreme deity of the Indian pantheon was evolved, another notion, of a philosophical rather than religious nature, had appeared. The word *brahma*, as a neuter noun, became impersonal, and was used by the philosophers to denote the sum of all nature, the germ of everything that is, the one thing that embraces everything. The idea is especially difficult to grasp. The incisive intellect of the Western nations, requiring clear definition in everything, does not readily apprehend the meaning of this brahma, and when we attempt to clear our understandings by an examination of the Vedic commentaries, such as the Upanishads, we are generally confused rather than enlightened. The book known as the Kêna-Upanishad says of this impersonal brahma: "Eye, tongue, mind can not reach it; we comprehend it not, we can not teach it to anyone; it is other than all that is known and all that is unknown."

What brahma was and what it became.

The speculations of the Brahmans relative to the meaning of the term would, in their turn, demand volumes of explication. They have a mysterious syllable, *ôm*, which contains a peculiar trinity of sounds, and by this they symbolize the brahma. This inexplicable explanation is in its turn made the subject of commentary, and the Mandukya-Upanishad is wholly devoted to explanations of the sense of ôm. As illustrative of the abstruse and involved ideas after which the authors seem to struggle, the following paragraph is quoted: "Ôm is immortal. Its unfolding is this universe; is all that was, is, and shall be. Indeed, all is the word ôm; and if there is anything outside of these three manifestations, it is also ôm. For this all is

Speculations and refinements respecting the ôm.

KAMI-RATI.

Brahma; this soul is Brahma. This soul has four existences."

Having once developed the notion of this neuter brahma, as an expression for the sum of all nature, the concept soon became the *end* of the religious system. This is to say that while the original system was active in its character, the degenerate form was passive. The mind, instead of resting upon Brahma, as the creator of the universe, came to rest upon brahma as the end of the universe, including man.

BRAHMA AS THE FOUR-FACED BUDDHA.
Drawn by E. Tournois, after a sketch of Delaporte.

The early Aryans of India, in common with all their related peoples in the West, gave themselves to speculations about the origin of things, how it was that nature came into her present forms, the agencies by which the world was made, and man, and everything that is. It was the problem of active creation, of the invisible effort by which universal nature was reared into its present form. But with the latter Brahmanism, this kind of speculation was supplanted by another directly the reverse. The question now became, not in what manner and by what agency nature was reared, but to what *end* the universe is tending, into what state all the material aspects of animate and inanimate nature will fall at the conclusion of the universal career.

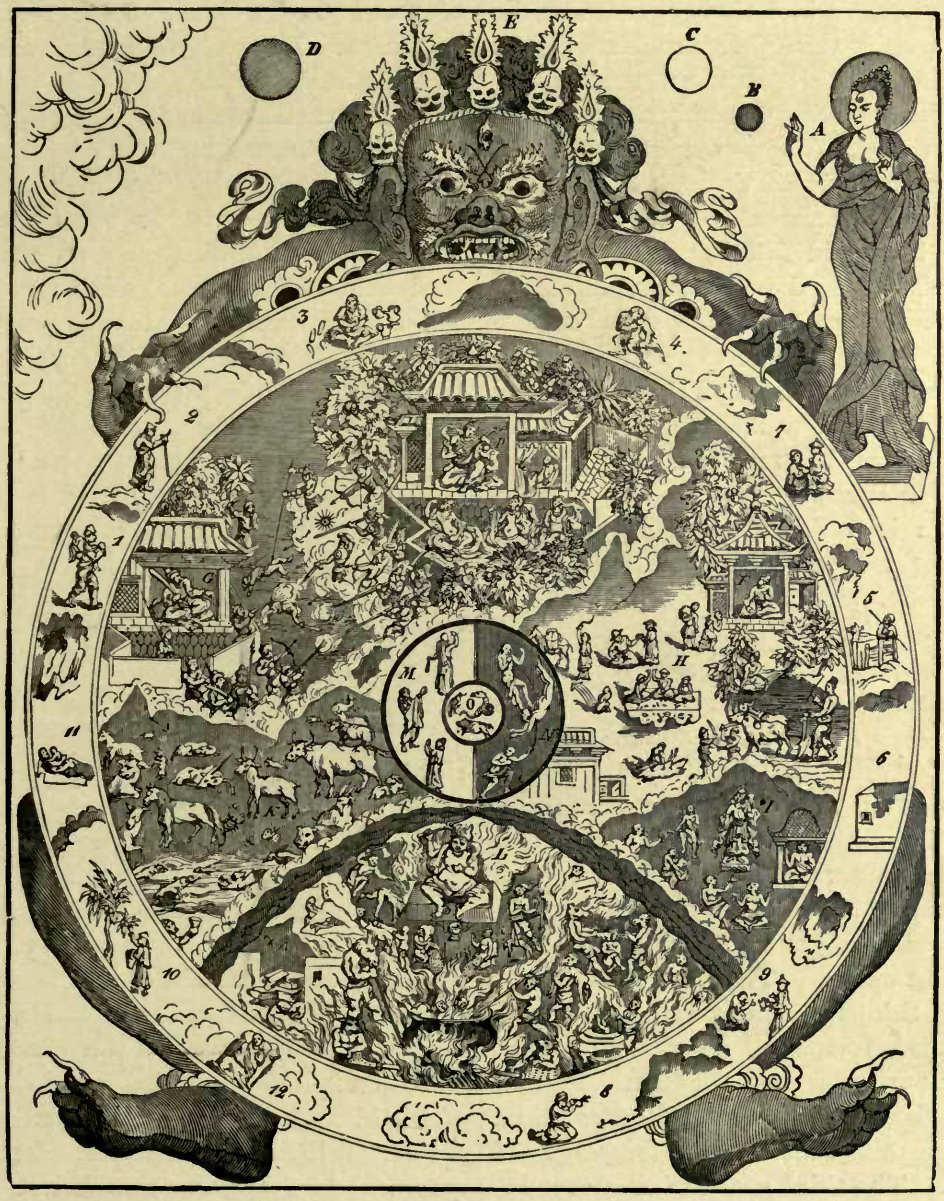
Later Brahmanism puts the end for the cause.

This species of inquiry at length predominated over the other, and the Brahmans began to teach the final condition of the universe, including man. They called it brahma, using the same term that they had employed as the name of the creator of all things, but in another sense. Henceforth the aim and endeavor of the worshiper must be, not so much to acquaint himself with this creator and his will, as to know that other brahma which stands in shadowy outline at the further verge of nature, ready to receive and swallow up

The believer must know the brahma which is to receive him.

all forms and aspects of the visible universe.

No contrast can be stronger than that which is thus offered between the bright and happy Vedic religion as it existed in the days of the old poets who sang the primitive hymns of Arya, and that fatalistic spell which has fallen upon the mind of India, transforming it into moods of meditative gloom and sheer brooding over the desperation of human life. A sort of astrology sprang up in place of the vivid concepts which the old bards had had of the visible powers of nature. The whole spirit and genius of the Indic race were turned to the darkest problems and most inscrutable mysteries of destiny and fate.



CYCLE OF TRANSMIGRATIONS ACCORDING TO A THIBETAN IMAGE.

Contrast of the old and the newer Brahmanism.

As a natural consequence of this

brooding over the transmutation of one form of visible nature into another, and so on and on to the final plunge into that brahma which they regarded as the end, even as the other Brahma was the beginning of all creation, there arose the notion of the transmigration of the human soul. The concept of a gradation up and down through all animate nature took firm hold of the mind, already bound in fatalism. The human race was divided into castes, and these became a part of the system of the world. All living creatures were the progeny of Brahma, and they must pass through the intermediate forms of life in order to be resolved into brahma again. Brahma is the origin, and brahma is the destiny of all, but the stages through which each living creature must pass are as various as the forms of life.

Source of the doctrine of the transmigration of souls.

Each living thing is born according to the deeds of that from which it is descended, and each living thing fixes, by its deeds, the state of that future living thing which is to be born therefrom. Animate nature has its orders through which the souls of men must pass in their ascending and descending stages of transformation. The lowest order of living things includes insects, fishes, serpents, tortoises, dogs, and asses. The next order has elephants, horses, lions, boars, Sudras, and other races not speaking the sacred language of India. The third grade of creatures includes thieves, actors, Rakshasas and Piçachas. The fourth order comprises athletes, dancers, armorers, drunkards, and the Vaisyas. The fifth includes the Kshatriyas, kings, great soldiers, speakers, the Gandharvas and the Asparases. The sixth class has the Brahmans, devotees, gods, and the great Rishis. The seventh has only Brahma himself. Such are the several orders of living things.

Theory of metempsychosis and gradations of living forms.

Brahmanism recognizes the sinfulness of man. For this sin there must be expiation. No such thing as redemption is recognized. All sin is balanced against so much punishment, and the expiation must be by the sinner himself. Man, however, may do something to free himself from the consequences and tendencies of his actions; either put himself in the ascending scale of transmigration, or in the descending scale which leads to the condemnation of his life to some of the lower orders of being in his next existence. Thus the soul may make its way upward until it is taken back into brahma, or may descend into insects, worms, and reptiles.

Doctrine of sin and of expiation.

The Brahmanical theory of sin is very different from that of the Western nations. It is essentially uncleanness, as distinguished from cleanness, which is righteousness. Pollution is the fundamental concept of offense against Brahma. Things are holy or unholy in proportion as they are clean and unclean, but the definitions of that which is clean or unclean sounds strangely to the understanding of the West. The highest notion of defilement is that which comes from the touch of the dead, the excretions of the body, the circumstances of birth, and of everything relating to the sexual life. The cleanest of living creatures is the cow. She is not only clean, but holy, and is incapable of defilement. The remedy for sin is penitence, fasting, mortification of the body, prayer, and recitations of the Veda. One of the greatest pollutions is drunkenness. He who so sins is compelled to drink boiling rice water unto death.

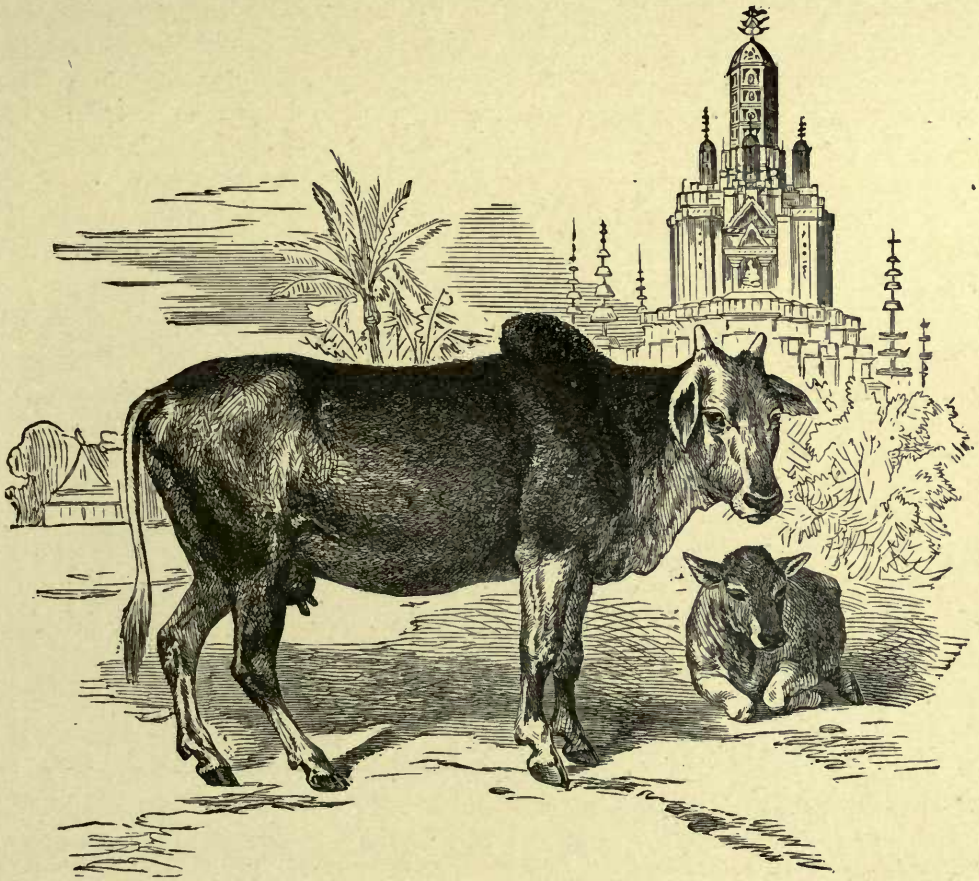
Notion that sin and uncleanness are one.

So far as earthly punishments are concerned, they are adjusted to the prevalent false theories of sin. Offenses done against the holy things are punished in the highest degree. The murder of a person belonging to a lower caste may pass with slight retribution, but the killing of a cow is a mortal crime. One who kills a Brahman with intent must thrust his own head three times into the fire, until he die. If the killing is unintentional, he shall build a hut in the woods and live alone for twelve years, carrying the skull of the slain man in his girdle. So throughout the whole list of human misdeeds the same irrational and ill-adjusted methods of punishment are employed.

Punishments adjusted to the false theory of sin.

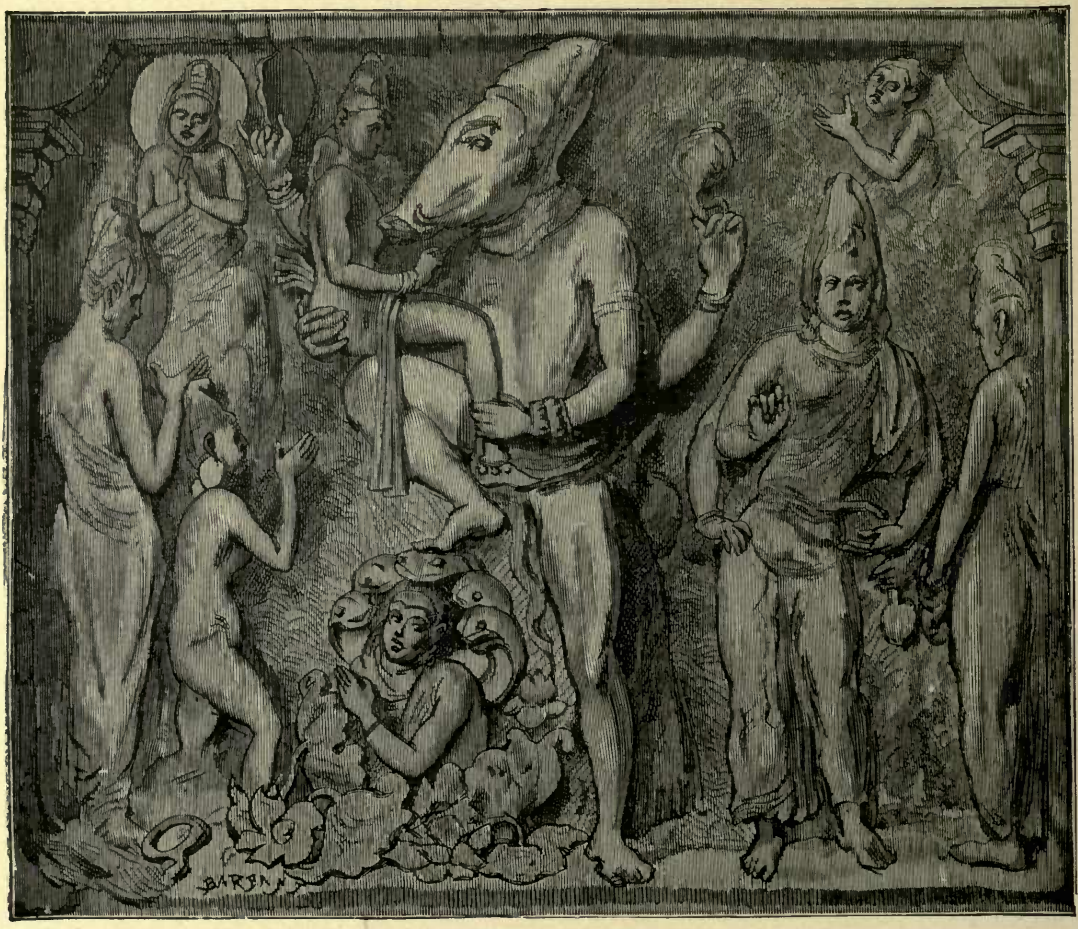
One of the concepts peculiar to Brahmanism is that of the incarnation of the deities. It is known by the name of *avatar*. On many occasions the great gods of the Indic pantheon have passed into the form of animals or men. Vishnu, the "preserver," has had ten avatars assigned to him, following each other in an ascending scale. In the first three instances he was incarnated in the form of animals, namely, as a fish, as a tortoise, and as a boar. In the fourth earthly revelation he was the Manu lion. Then began the human avatars. In the fifth estate Vishnu was a dwarf; in the sixth, a hero; and in the seventh, a Ramchandra and a Krishna. Buddha himself was an incarna-

Doctrine of the incarnation, or the avatars.



THE SACRED COW OF INDIA.—Drawn by A. de Neuville.

tion. It is also believed that Vishnu will ultimately appear on earth in his own person. This will happen when the highest age of man has been reduced to twenty-three years. When Vishnu shall come he will be called Kalki, and will possess eight supernatural powers on the earth. This great avatar is to occur at the end of three hundred and sixty thousand years, as time is reckoned by men, or one thousand two hundred years as it is reckoned by the gods.



VISHNU IN THE FORM OF A BOAR.

It appears that Siva, the third person of the Brahmanical trinity, was an old god of the Dravidian race before the incoming of the Aryans. By them this divinity was raised to the rank of co-equal with Brahma and Vishnu. Siva was identified with Rudra, god of the storm, just as Vishnu took the place of Indra in the older mythology. The Brahmanic system represents Siva as dwelling at times with the human race, but never as incorporated in earthly form. His place in the mythological system is that of destroyer, and hence his genesis from the storm god of the Old Dravidians. His power is symbolized by the trident, while in his hands he bears a lasso or sling, an antelope, and sometimes a flame of fire.

Place of Siva in the Indian pantheon.

Ethnic history does not demand more than an outline of the religious beliefs which the ancient kindreds of mankind

adopted for themselves and their posterity. It is only while religions are expressive of the subjective states of the mind that they are really an ethnic condition. When they pass into objective ceremonies and institutional forms, they become a part of the subject-matter of general history. In this connection, as in the account of the Iranians, we offer no more than a sketch of that primal faith which was developed by the early bards and rhapsodists who, with upturned faces, chanted the praises of the gods in the valleys of India. In course of time, both in Iran and in India, an age of commentators and mere grammarians succeeded to the age of poets, and lifeless ceremony took the place of living inspiration. From this time forth the ethnologist has but little concern with the inflected forms, the mere outer garb which the Brahmans flung around the ancient religion of the East.

To what extent religions are part of ethnic history.

One other topic remains to be considered before the Vedic system of religious evolution is dismissed. The spirit of the old faith had died out many centuries before the Christian era. On the tongues of the priests even the apostrophes of the old rhapsodists and seers had become an echo and a mockery. It was under such circumstances, in the latter part of the sixth century B. C., that the great reform was instituted which was destined to carry on its tide more than thirty per cent of the human race. It originated with Sâkya Gautama, commonly called the Buddha, Prince of Kapilavastu, in Northern India. But the reform, like that of Luther in the West, was already prepared, in its elementary conditions, by a reäction in the mind of the upper classes against the absolutism and uselessness of the Brahmanic order.

Apparition of Sâkya Gautama the Buddha.

The career of Gautama is now accessible in many forms to English readers, and need not be repeated. It was, in general, that of a sincere and elevated mind, highly sensitive in its organization and inspired by philanthropy, re-

SIVA AS MAN AND WOMAN.

Career and evangelism of the "Enlightened One."

belling against the current religious system of his country and people. He retires, as if into the desert. He muses long on life and destiny. He communes with himself and with the invisible Spirit. He struggles and writhes in anguish and despair. Light breaks into his understanding. He becomes the Buddha, the "Enlightened One." He

NEPAL BUDDHA IN BRONZE.
Drawn by P. Sellier, from the collection of Le Bon.

takes that name and returns to his people as a teacher. He would substitute for the intolerable mass of formalities and philosophical dogmas of the Brahmans a new code of thought and morality. He would teach the living way. First a few, and then multitudes, follow him. He becomes, even in his life, a great leader. His work is well begun. The burden is upon him. He leaves to others what he could not himself accomplish within the limits of a mortal life. He goes again alone to the woods and deserts. He journeys on, and at last, wearied with the burden of thought and oppressed perhaps with the sorrows of the race, he sits down by the root of a tree, and there, alone, gives up his spirit and enters into Nirvana.—Such is the origin of that great system called Buddhism, which is now professed by 31.2 per cent of the human family.

The reform thus instituted was almost identical in its nature with the Protestant revolt which roused Europe from her stupor in the sixteenth century. Buddhism is essentially the Protestantism of the East. It is to the older Brahmanism what Protestantism is to the Catholic Church in Europe and America. If we look at India the parallel may be carried still further. Buddhism did not achieve, or at least maintain, a great success in the country where the older system of faith prevailed. Brahmanism had taken too deep root in the soil of India to be exterminated by a counter revolt. Just as in Italy the ascendency of Rome has ever been maintained, so in its central seat the power of Brahmanism remains to the present day.

Parallel of Buddhism with Western Protestantism.

While Buddhism had temporary and local success in the land of its origin, its great triumph was achieved by its dissemination in foreign lands. It swept eastward and northward to the limits of the furthest oceans, carrying with it a great proportion of the Mongoloid races of mankind, but the elder faith held its own against the innovation in the valleys of India, and continued to bear up its vast system of inane speculation as the better theory of life and destiny.

It is impossible to convey to one who has not personally acquainted himself

with the degradation of the Brahmanical faith and practice an adequate idea of its debasing character. Its ceremonies are not only offensive to the human understanding, irrational and foolish as expressions of religious faith, but they are disgusting to taste and indecent to the eyes of morality. The degeneration of the system is complete, its ruin overwhelming. Whatever potency it may have had in former centuries to purify the theory and practice of human life, or even to control its violence or moderate its excesses, has long since passed away, and inane ceremonies and ridiculous dogmas are all that remain. These, however, are sufficient to uphold the Brahmanical ascendency in India, and until this is broken, neither Buddhism nor any other system of faith can penetrate the gloom and despair of the Indian mind.

Debasing character of the Brahmanical ceremonies.

INDICAN FUNERAL PYRE AND SUTTEE.
After a Persian miniature.

A few instances of the external, visible aspect of Brahmanism may prove of interest. The usage until recently much in vogue was sutteeism, or the devotion to death of the widow of a dead husband on his funeral pyre. This was regarded and is still regarded, as an act of the highest merit. The woman was taught to believe that by immolating herself in this manner she should enjoy thirty-five million of years with her husband after they had both gone to Brahma.

Practice of sutteeism; the rite not obligatory.

For the credit of humanity, the system was never obligatory. The sacrifice was voluntary; but the superstitious despotism over the mind of the victim was sufficient to enforce it with more energy than might have been expected even of civil authority.

India is full of devotees. In every populous district and even in waste places the traveler will find them. The

INDIAN DEVOTEES.—Jogees Wounding Themselves.—Drawn by Emile Bayard, from a photograph.

idea is similar to that which in the Middle Ages drove the monks and anchorites into isolation and poverty. The notion that the mortification of the body is meritorious as a means of salvation

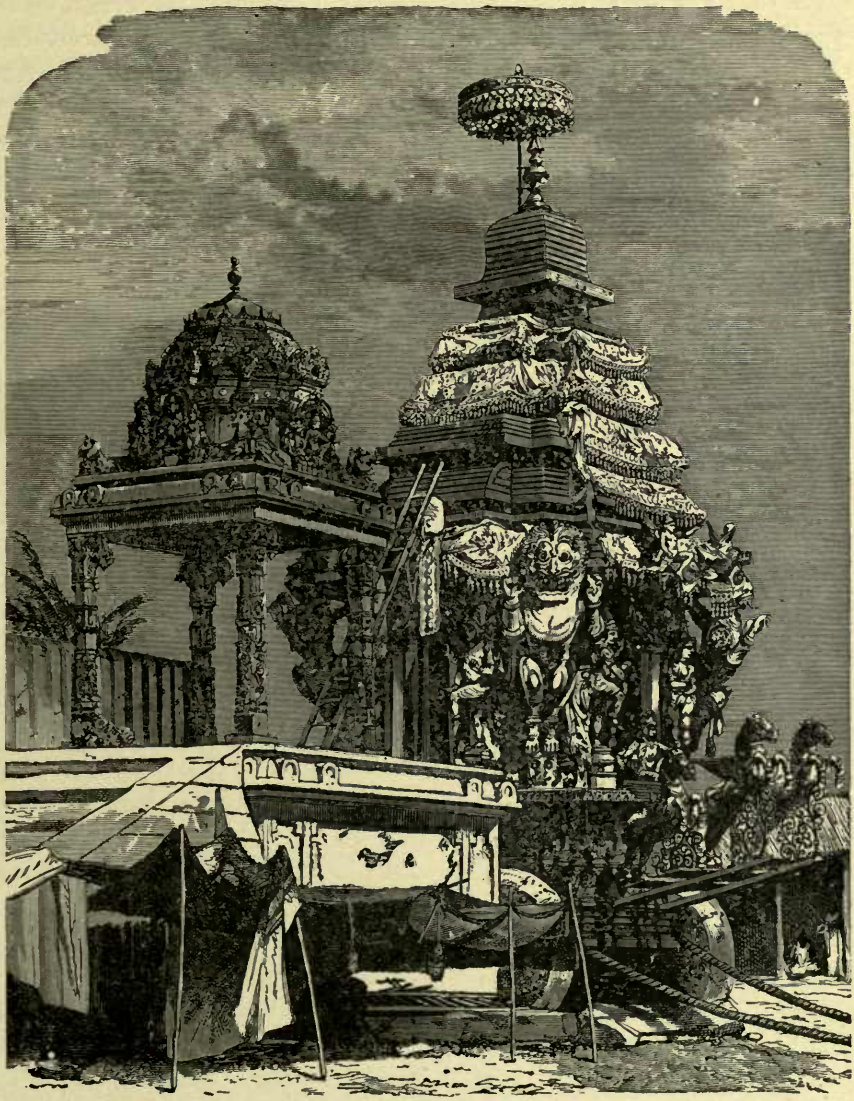
Usages and self-inflicted torture of the devotees.

from sin or impurity rests upon the soul of India like a pall. The space of a chapter would not be sufficient to enumerate all the forms of bodily degradation and mutilation which the depraved ingenuity of the devotees has invented wherewith to mortify themselves and prepare for happiness hereafter. One superstitious wretch will sit starving in the dirt, or will take only so much food as barely to feed the fire of life. Such emaciation and wretchedness are not to be seen otherwhere in the world. Another stands and repeats senseless mutterings out of the sacred books. A third goes about with a living snake drawn through a slit in his tongue. Another hangs a weight to some bodily organ until it is drawn out of all semblance to nature. Another thrusts an arrow or a sword through his

limbs, and still another holds up his hands with nails and spikes driven through them.

Belief that bodily distortion is efficacious against sin.

The distortion of the body into some horrible and repulsive form is thought to be most efficacious. Many devotees take a strange attitude and hold it by force of will until the freedom of the given organs is destroyed. Some will hold up an arm straight above the head for days and weeks and months, until it becomes wasted away and rigid as bone. Others, by contortion, twist their muscles out of shape until they are no more able to return to symmetry or perform their office. And so on and on through an endless variety of tortures and torments self-inflicted by a superstition which admits of no limit or palliation.



CAR OF JUGGERNAUT.
Drawn by A. de Neuville, from a photograph.

Not only has the Brahmanical system fallen into this degraded aspect; it has sunk to absolute immorality and indecency. Perhaps no single ceremony better illustrates the debasing level to which the national religion has descended than does the ceremony of Juggernaut. This is primarily the name of a town of Bengal, on the northwest coast of the bay of that name. The true word, however, is Jagannâtha, meaning "the lord of the world," which was the descriptive epithet of Vishnu when he was incarnated as Krishna. This gave the name to the Brahmanical temple, and finally to the town.

City and annual ceremonial of Juggernaut.

Juggernaut became a city of temples. The principal street is for the most part filled on both sides with religious establishments. At the further end of the main avenue, where it widens out to rather grand proportions, is situated the famous temple, most holy, perhaps, of all the shrines of Hindustan. More than a million of pilgrims come annually to say their prayers and make their offerings at this spot. Around the temple is a lofty inclosure of solid stone, six hundred and fifty feet square, covering an area of nearly ten acres. In the eastern wall is a great gate, through which the pilgrims ascend, by stone steps, to the terrace. The latter is four hundred and forty-five feet square, and on this the great pagoda rises. It is thirty feet square at the base, and the pinnacle is two hundred feet above the ground level. The structure tapers from bottom to top, and is rounded off on the summit after the Oriental manner.

Siva and Subhadra are next in eminence among the deities who are worshiped in this city. Of these gods there are wooden images painted blue, which are regarded with extreme veneration. Each idol has a "chariot," so called, consisting of a lofty platform on wheels, upon which the effigies of the deities are mounted. The chariot of Juggernaut is thirty-four and a half feet square and forty-three and a half feet high. It is supported on sixteen wheels, which are six and a half feet in diameter. The great festival of the deity occurs in March of each year, and is governed in the date of its return by the phase of the moon, like the Christian feast of Easter.

At this time the city is thronged with pilgrims from all parts of India. The cars of the different idols are drawn by the multitude through the city and for a short distance into the country, where the idols have what may be called a summer home. In the case of Juggernaut, a long cable is attached to the car, and tens of thousands of pilgrims and worshipers take hold with their hands and draw the idol through the streets. On the platform about the effigy are the priests, who, while the procession is under way, perform with great activity the ceremony prescribed for the occasion. This consists of what may be called the abandonment of humanity. The priests go through with a series of bodily attitudes utterly disgusting and obscene, during the performance of which vulgar gymnastics the multitude witnessing the same are in the highest glee of worship.

Scenes at the procession of the tower chariot.

This shameless exhibition of depravity is the essence of the ceremony, which is here cited in proof of the utter degradation to which Brahmanism has descended. About the chariot the throng is so great and the enthusiasm so high that rarely does the procession reach its end without some of the multitude being crushed to death under the wheels of the car. It is said—though the evidence is not definite—that devotees sometimes throw themselves under the wheels and are purposely crushed to death. It is believed, however, that at the present time this does not occur. The popular belief that mothers are in the habit of throwing their children under Juggernaut, that they may thus be sacrificed to the god, is proved to be entirely erroneous.

Question of immolation under the car.

The ceremony above described is illustrative of many peculiar to modern Brahmanism. One of the most widespread superstitions of the present day is that relating to the Ganges. This is

SACRIFICE TO THE GANGES.—Drawn by Emile Bayard.

regarded as the sacred river of the country. The belief extends, indeed, to the whole system of streams, nineteen or twenty in number, which descend from the spurs of the Himalayas and combine their waters in the principal river. Perhaps the superstition is very ancient. The Nile was worshiped in like manner. A great and tractable river in a primitive country thickly peopled must always have been regarded as an incalculable blessing.

Worship of the Ganges and sacrifice thereto.

In an epoch of the nature worship it is natural that the adoring instincts of men should turn to the visible source of their blessings. It may be thus that as early as the composition of the Veda the Ganges was looked upon and adored. At the present time, and for some centuries in the past, the waters of the great stream are regarded as holy. They are dipped up and carried into all parts of India that they may contribute a purifying element in the sacrifices and ablutions of the altar. He who possesses a bottle of the sacred water carries with him a talisman against impurity and sin. At many places the river is made accessible to pilgrims and other worshipers by flights of stone steps going down to the water's edge, and on these the Brahmans and devotees, and often the common people, may be seen standing and worshiping the river as it flows. If the ceremonies stopped with the dipping up and bearing off of the waters for purposes of purification, or even with the idolatrous worship of the stream, there might be less cause for repugnance to the Brahmanical formula, but to be drowned in the holy river is in the nature of a blessing. From time immemorial sacrifices of human life have thus been made, especially by mothers, who bring their children and commit them to the oblivion of the floods. Civilization stands against it, but the usage still exists.

CHAPTER XXXIX.—CASTES AND RACE DIVISIONS.

WE come now to consider the greatest single fact which the Brahmanical system has transmitted from ancient to modern times. It is the system of *Caste*. The fact expressed by this term is not well apprehended by the Western nations. It signifies the natural and fixed classification into which the vast and growing populations of India fell, under the influences of the Aryan conquest, the Vedic institutions, and the administration of the Brahmans. Caste as it exists in India extends downwards through all Brahmanism into the Vedic epoch, and has its roots in the profoundest soil of the prehistoric ages. Given the existing conditions in the time when the Aryan race was flung upon the aboriginal peoples of India and began by conquest to possess the land, and under the influences of the Vedic poets to organize their nature worship into invisible institutions, and the whole system of caste ensues. It is our purpose, then, at this point to trace the course of events by which the great fact of caste was built up into the social structure of India.

Origin and evolution of caste among the Hindus.

In the first place, it must be remembered that when the nature worship

expressed in the Vedas was given forth, it was done in a preliterary age by a class of poets. It was the language of rhapsody, poured forth in verse and committed to memory. The poem, or hymn, thus composed was taught by the rhapsodist to his son and to other bards. A body of Vedic psalms was thus produced and transmitted orally from generation to generation. There were great singers who knew many hymns and others who could chant but a few. It was in this situation of affairs that the famous quarrel, the shadow of which is seen in the Vedic worship, arose between the two rival sages Vashishtha and Visvamitra. They disputed with each other the poetical and religious leadership of the Indic race.

Division of the Indicans under Vashishtha and Visvamitra.

Around Vashishtha, the successful contestant, and his followers others who learned the hymns were gathered. A clan of singers sprang up. Some hymns were potent to give victory in battle. The singers of these were specially honored. The prevailing prayer, or hymn, was called *brahma*, and the singer of it was a *Brahman*. "Whosoever," says the Rig-Veda, "scoffs at the Brahma which we have made, may hot plagues come upon him; may the sky burn up the hater of the Brahmas." Such was the origin of the Brahmanical caste, highest in rank of the four in which Indian society is divided.

Rise and ascendency of the Brahmanical caste.

In the age of conquest, when the Aryan immigrants were making their way by war from the valley of the Indus to the valley of the Ganges, the successful chieftain was next in honor to him who chanted the praises of the gods and prayed for victory. Around each chieftain would gather a certain number who devoted themselves especially to war. Such leaders took the better portions of the land and soon established themselves apart from the body of the tribes as an independent class. They were known as Kshatriyas,[1] or "companions of the king," and they presently constituted the second caste in the system of India.

Development of the Kshatriyas, or Rajputs.

A SIVAÏTE BRAHMAN—TYPE.
Drawn by F. Regamey.

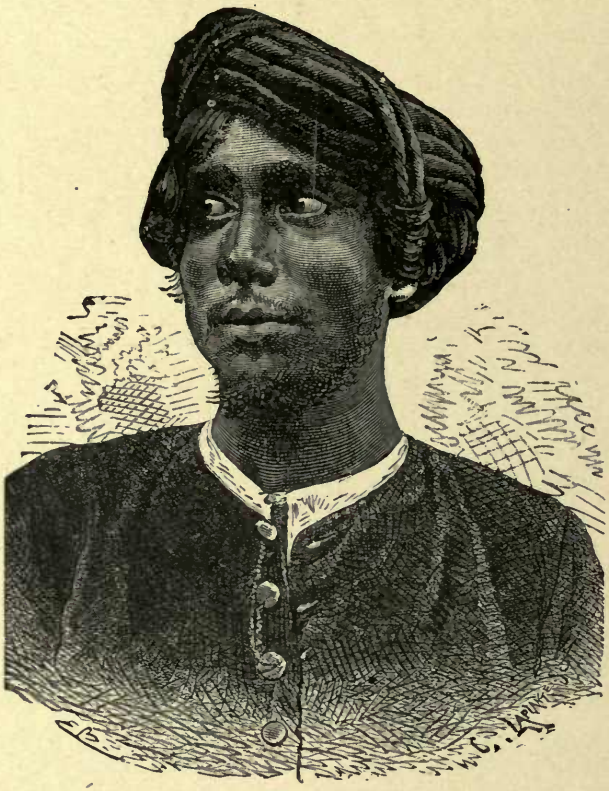
The weaker portions of the immigrant tribes settled on the soil and became husbandmen. They received the name of Vaisyas, signifying simply "the people." Without the adventurous spirit requi-

Vaisyas, or "people," constitute the third caste.

[1] The modern name of the Kshatriyas is *Rajputs*.

site for war, they chose to arrange themselves in secluded places and village communities, where safety was the chief consideration. Whoever in the chaos of a half-barbarous age chooses safety, chooses subordination. The class of husbandmen became subordinate to the Kshatriyas, as the latter were in some sense inferior to the Brahmans.

Caste always implies a conquered as well as a conquering race. The aboriginal peoples of India, especially the Dravidians, were brought into complete subjection. They were reduced to servitude. They were called "once-born" slaves, to distinguish them from the noble "twice-born" Aryan conquerors. These subjugated aborigines were known, and are still known, by the name of Sudras, between whom and the three superior classes of Aryan descendants there is nothing in common. Among the other three castes there is some degree of mutation. Sometimes the Kshatriyas, by learning the hymns and ceremonies of the national faith, may pass into the rank of Brahmans. An aspiring Vaisya, or husbandman, may throw off his peaceful dispositions, go to war, and possibly make his way to a place among the Kshatriyas, or warrior caste. But the Sudra is a Sudra, a slave of slaves, fixed by the fate of birth to unalterable subjection and isolation.



A SECOND CASTE PANDIT—TYPE.

The Sudras; possibility of caste promotion.

In the course of this outline of the religious system which has constituted one of the essential elements of the Indian character from the remotest epoch to the present day, it has been necessary to neglect all time-relations and to bring together parts which are separated by centuries. The aim has been to present distinct images by gathering certain leading features and setting them in relation the one with the other. It has been necessary, in so doing, to express important facts in a single word or reference, and to cover the chasm of ages with a clause. It will now be our purpose to look in upon the India of modern times and, as in the case of the Iranian nations, to delineate the character of the multifarious peoples classified as the descendants of those ancient Indic Aryans who drifted by migration through the passes of the Hindu-Kush in an epoch below the morning twilight of history.

Summary character of the present view.

Within the limits of India, as defined in a former book, dwell about one sixth of all the inhabitants of the globe. Until within the last quarter of a century

but little was known of the multiplied millions populating these vast and untraversed regions. The ascendency of Great Britain in the East suggested, and the facilities of her government in India encouraged, an effort to make an actual enumeration of the almost limitless nations under her sway. Not, however, until 1871–72 was an effort actually made. It was attended with unusual success. The whole work was done in its principal parts concurrently in a single night. The officers of the government had arranged that every village and district in British India should return its own numbers to the registrars, and, with very few exceptions, this was

Efforts of Great Britain in the census of 1871-72.

THIRD CASTE TYPE—LANDOWNER OF KOUMAN.
Drawn by G. Vuillier, from a photograph.

done. The spectacle itself was worthy of commemoration. Out of the British islands in the West the strong arm of a Teutonic race had reached back more than ten thousand miles into the East, had lifted up over one of the vastest and

LOW CASTE TYPE—DANCING WOMAN, OR BAYADERE.

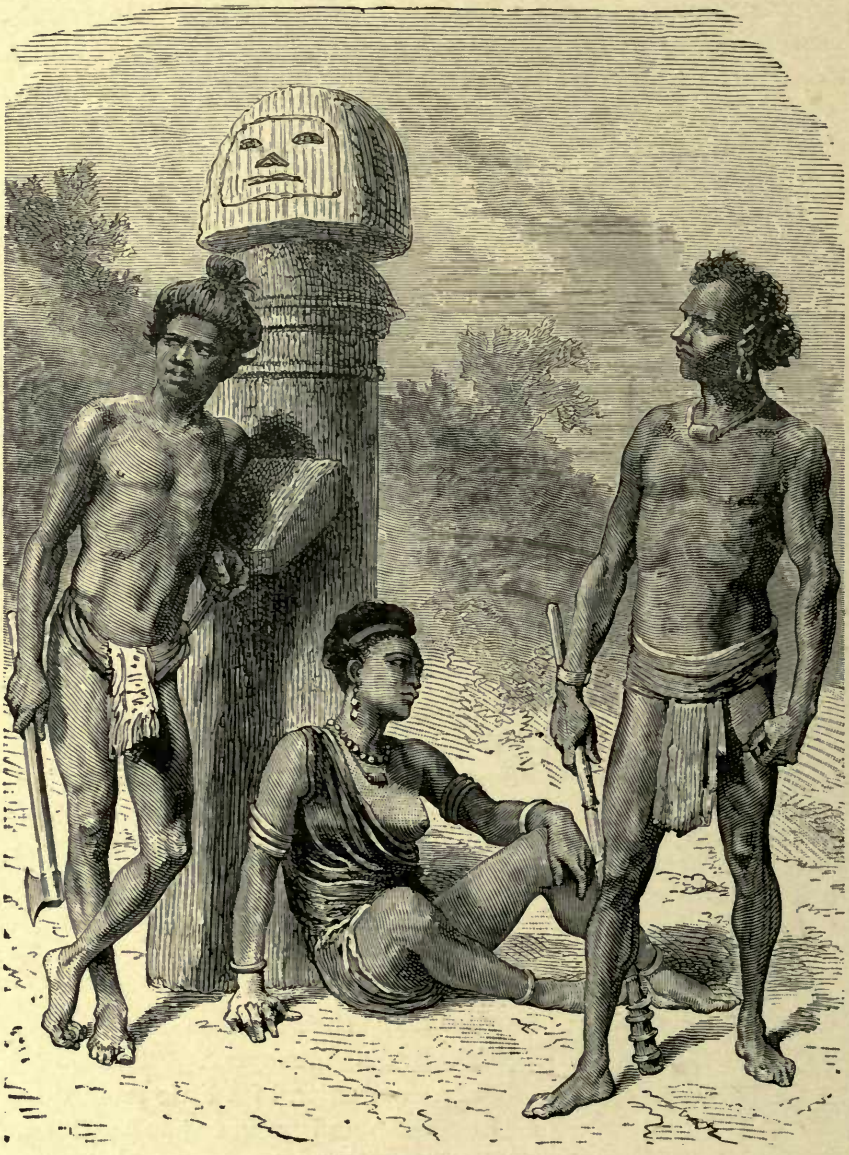
richest regions of the earth the rod of authority, and had now, by a single effort, accomplished what had never been accomplished before, an enumeration of the peoples under English dominion.

The result has been a better knowledge of the extent and variety of the Indian populations. The enumeration showed that British India alone contained a population of a little more than a hundred and ninety-one million, while the native states increased the aggregate to two hundred and forty million nine hundred and thirty-one thousand five hundred and twenty-one. This gives an average of one hundred and sixty-three to the square mile throughout India. The aggregate is twice as great as that which Gibbon gives for the pop-

Aggregate results; density of population.

ulation of the Roman empire at its best estate, under the Antonines, in the second century of our era.

Not only do we have thus an astounding total for the peoples of India. In some districts the density of the population is almost inconceivable, reaching the limit of six hundred, or even more, to the square mile. It has generally been agreed among Western statisticians that any people who surpass two hundred to the square mile must sustain themselves by manufacturing interests, by mines, and by the commercial industries of great cities. In India, however, this rule is turned to naught by the existence of purely agricultural populations *three times* as dense as the prescribed limit for Western peoples. The province of Saran, in North Behar, has an area of two thousand six hundred and fifty-four square miles, and no city with a population greater than fifty thousand, and yet the average is seven hundred and seventy-eight people to the square mile, and in one place the maximum rises to nine hundred and eighty-four. A careful estimate places the average for the whole valley of the Ganges, from Saharunpur to Calcutta, at five hundred to the square mile, or nearly double the rate for the population of England, including her cities.



SONTALS OF BEHAR—TYPES.
Drawn by Emile Bayard, from a photograph.

The general feature of modern India, as it relates to population, is the absence of great cities. There are in the whole

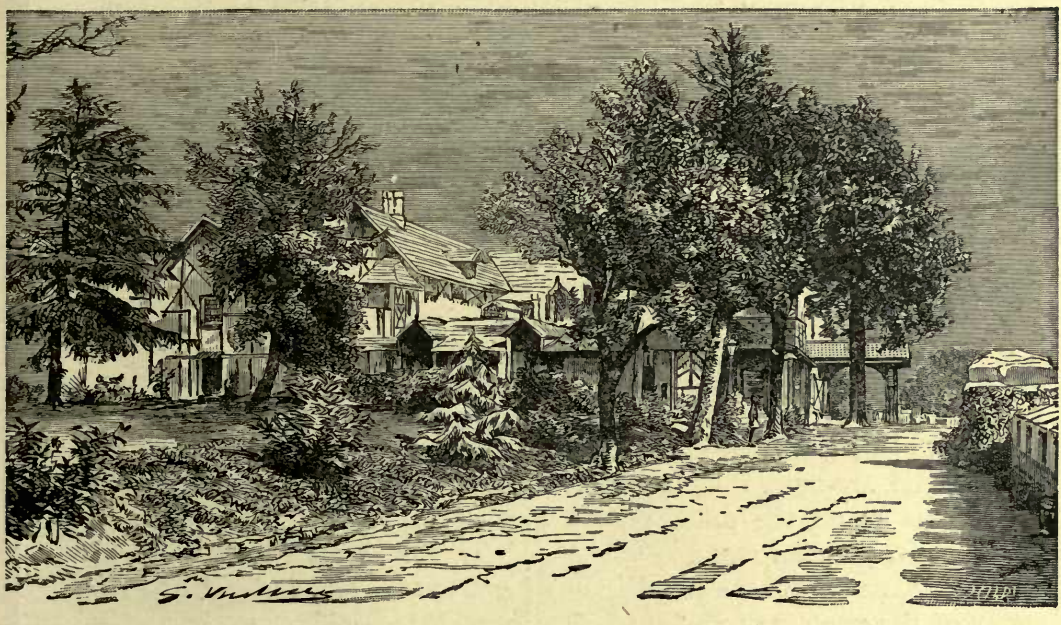
of the British Indian empire only eighteen cities of the first class, that is, having over one hundred thousand inhabitants each, and of these only two, Bombay and Calcutta, exceed half a million respectively. This will appear an astonishing fact when we reflect that in the United States of America, after only a century of national development, there are twenty-six cities of the first class[1] in a popuation of only sixty million.

Distribution of the people; absence of great cities.

tion of fifty thousand. Nowhere on the globe, with the possible exception of China and Japan, is there so vast and dense an agricultural, or country, people as in the provinces of India.

If we look at the distribution of this great mass of human beings according to the religions which they profess, we shall find first of all the prevailing Hinduism, or Brahmanism, which has its basis ultimately in the Veda and in the

Proportion of population among the castes.



VIEW IN THE PUNJAB, SHOWING THE GOVERNOR'S RESIDENCE AT SIMLA.—Drawn by G. Vuillier, from a photograph.

The disproportion thus expressed between the agricultural distribution of the ancient peoples of India and the city aggregations of Europe and America not only surprises the statistician, but affords the elements of a profound problem in the progress of civilization. The census of 1871–72 shows four hundred and ninety-three thousand four hundred and forty-four towns and villages in British India, but of this number there are only forty-four that have reached a popula-

bards of the Aryan immigration. Of these Hindus there are over one hundred and thirty-nine million. They are distributed in general throughout Southern India and in the upper valley of the Ganges. The student of history will revert readily to the many Mohammedan invasions and conquests that have been made in different parts of the countries now dominated by England in the East. Next after Hinduism is Islam, whose followers in Sindh, the Punjab, Eastern Bengal, and the Northwest provinces number over forty million.

[1] Census of 1880.

In the Central provinces, in Bombay, and sparsely scattered in other districts is a large element derived from the Old Dravidian population, which still professes various forms of religion of the Mongoloid character quite unlike, in ceremonials and superstitions, to the other faiths of India. These aboriginals number about five and a half million. Fourthly, the Buddhists and Jains who are confined to British Burmah number over two million eight hundred thousand. The sect called the Sikhs are found only in the Punjab, and number a million one hundred and seventy-five thousand. The Christians, who are as yet confined to the coast cities and a few isolated spots in the interior, number eight hundred and ninety-seven thousand, while certain unclassified clans, professing peculiar beliefs here and there, are registered at over half a million. It will thus be seen that the Hindus proper, or Brahmans, if we use the religious term by which they are distinguished, are more than three times as numerous as all the other religious divisions of the Indian races.

Ethnic and religious elements in the census.

Before proceeding to the ethnic classification of the peoples of modern India, it will be of interest to notice a peculiar general feature relative to the proportion of the sexes. Of the hundred and ninety-one million of people in British India there is an excess of males over females of nearly six million. The proportion is about one hundred to ninety-four. In the province of Oudh the males are seven per cent in excess of the females, and in Bombay eight per cent. In the Northwestern provinces the excess rises to twelve per cent, and in the Punjab as high as sixteen per cent. It has been currently believed that the practice of female infanticide so much in vogue among aborigines and in the Oriental countries has produced this result. There are places in India, such as the Meerut district, in which there have been found as many as seven boys to one girl, and in other provinces the disproportion is almost as great.

Excess of males in the Indian races.

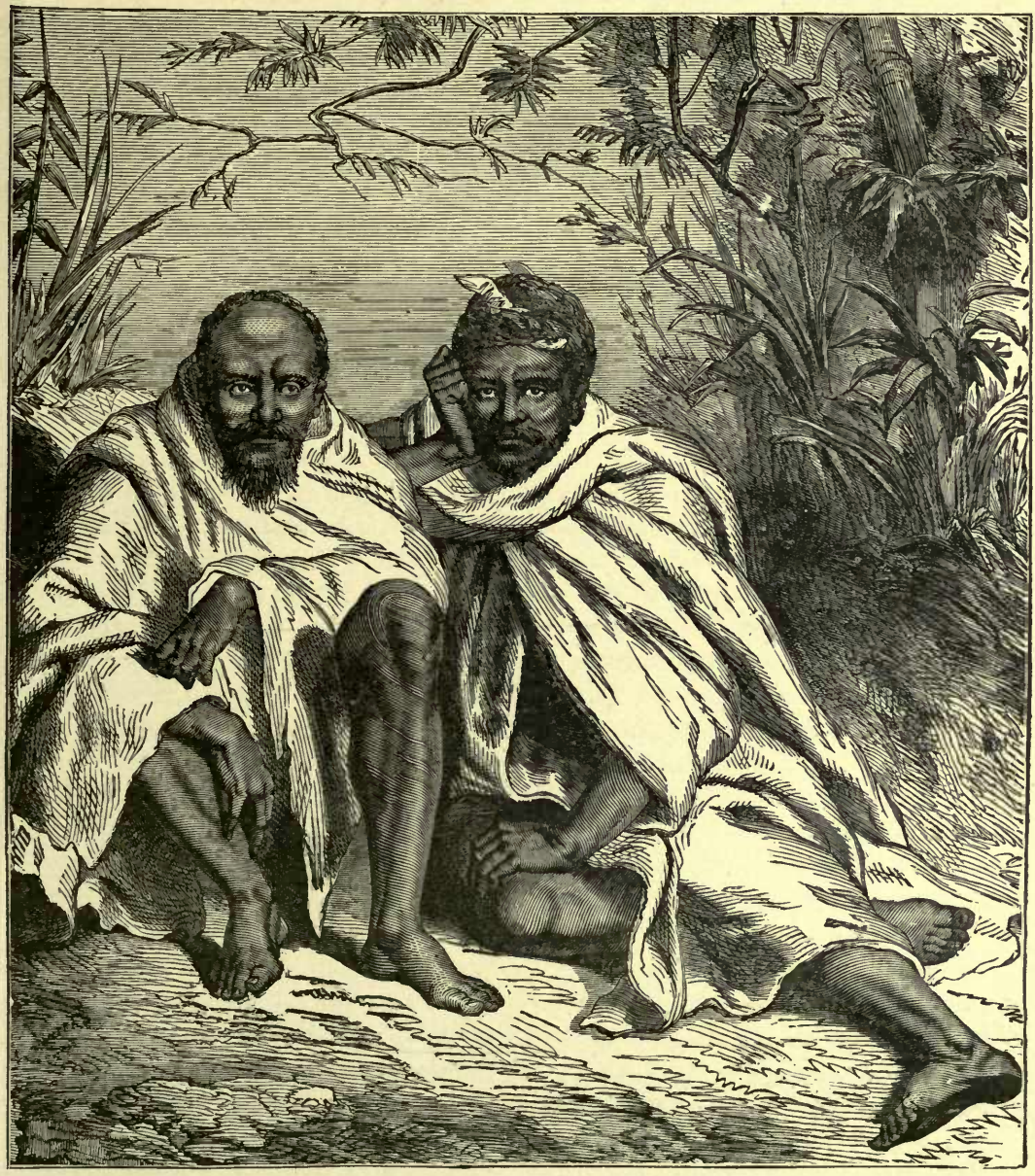
We pass on to consider the true ethnical classification of the peoples of India. The grouping of these races is most largely effected on the basis of religion and caste. Of these there are five principal divisions, each of which is widely distributed and numerous. In noticing these, we will proceed according to antiquity of occupancy in the country; that is, we will notice the oldest Indian races first and the more recent afterwards. There is, of course, some obscurity in determining the relative antiquity of ancient peoples, but linguistic science is generally a sufficient evidence of priority and order of development. Glancing, then, at the ethnic divisions of the Indian stocks, we find:

Five principal divisions of the Indican populations.

1. *The Old Dravidians and their Descendants.*—The derivation of these from the Mongoloid stem has already been noticed in a former chapter. In general, the peoples of this stock are found in the southern part of the peninsula, but branches of the family extend as far north as Chuta-Nagpur. They are, doubtless, the oldest race in India. Most of the Dravidian tribes are associated in tolerably compact settlements, but in some parts of the country, especially toward the north, they are sparsely scattered among the other races. Twelve distinct Dravidian languages have been examined and classified. These are the Tamil dialect, the Malayalim, the Telugu,

Distribution and tribes of the Old Dravidians.

the Kanarese, the Tulu, the Kudugu, the Toda, the Kota, the Gond, the Khond, the Uraon, and the Rajmahal. Each of these tongues has its peculiar



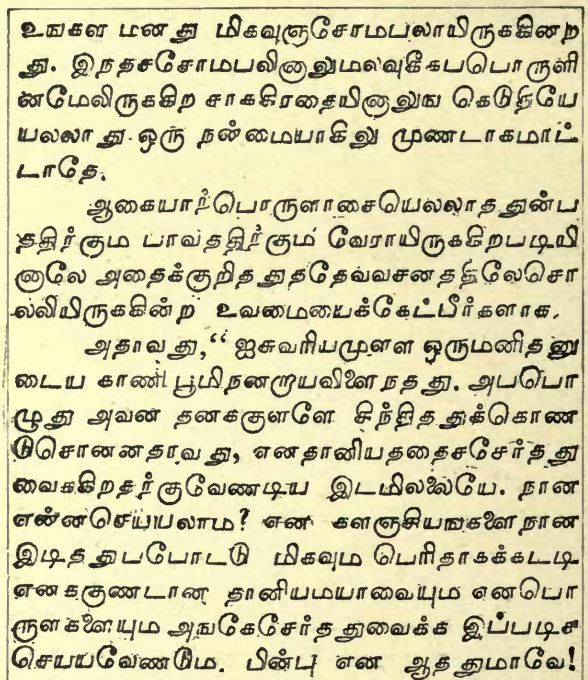
OLD DRAVIDIAN TYPES—KHOND CHIEFTAINS.

vocabulary and grammatical structure, all different by a wide departure from the other languages of India.

2. *The Hill Tribes of Central India.*—These are the upland races, beginning with the Bhils of Bombay on the west, and extending to the Sontals of Bengal in the east. The race characteristics of these peoples are thought by some ethnographers to be in affinity with the Negroid family of mankind, but this is, perhaps, incorrect. They, like the Dravidians, are of Mongolian extraction,

Kolarians, or hill populations of the interior.

and belong to an original stock derived from the same stem with the Dravidians themselves. All these hill tribes are associated together by a linguistic classification, and are known by the name of Kolarians. They appear to have entered India, especially Bengal, by the north-east passes of the mountains. Their habitation geographically is along the northern and eastern edges of the triangular table-land constituting the southern half of India.



SPECIMEN PAGE OF TAMIL BOOK.

The difference between the Kolarians and the Dravidians is the difference between a more ancient and a less ancient stock of people migrating into regions of the same country by different routes. In Central India the two families have had considerable contact and intermixture, and in these provinces the Dravidians have given character to the race. The latter are much the more numerous, and are massed toward the south, extending as far down as cape Comorin, while the Kolarians are scattered through the northern region in isolated tribes. The Sontals, who are the eastern-most representatives of the race, occupy the extreme eastern edge of the table-land of Central India, next to the valley of the Ganges. On the west, at a distance of four hundred miles, dwell the Kurkus, separated from their kinsmen by mountain ranges, great forests, and intervening tribes of Dravidians and Aryan descendants.

Difference between the Kolarian and Dravidian races.

In Northern India, Madras, and Orissa are found the remnants of the Savars, a degenerate and mendicant people, reduced to the rank of servants, yet their name was known in the earliest ages of history, and is mentioned by Pliny and Ptolemy. The Kolarian languages are divided into nine principal groups: the Santali, the Mundari, the Ho, the Bhumij, the Korwa, the Kharria, the Juang, the Kurku, and the Savar. There is a marked difference between the vocabulary of the Kolarians and that of their race kinsfolk, the Dravidians on the south, and the grammars of the two peoples are as distinct as those of German and Greek.

Place of the Savars; Kolarian languages.

3. *The Indo-Chinese Races.*—These be-

GROUP OF LANDAKIS, OR HILL HINDUS—TYPES.—Drawn by G. Vuillier, from a photograph by De Frith.

long geographically to the slopes of the Himalayas, to the valley of Assam, and to Burmah. The latter country is wholly occupied by people of this stock. In Northern Bengal there are certain low castes, half Hindu and half Kolarian in their characteristics, who are also thought to be Indo-Chinese. It is evident that this race came into Burmah and Assam by the northeast passes of the Himalayas. They have clearly had an original common home with the Chinese and other Mongolians of Central Asia. There is a similarity of dialect, in some instances so marked that particular expressions might be understood alike in Bengal and Canton. The linguistic designation of the Indo-Chinese group of nations is Thibeto-Burmese. Of this family of languages there are more than twenty dialects: the Cachari or Bodo, the Garo, the Tripuara Mrung, the Thibetan or Bhutan, the Gurung, the Murmi, the Newar, the Lepcha, the Meri, the Aka, the Mishmi, the Dhimal, the Kanawari, the Mikir, the Singpho, the Naga dialects, the Kuki, the Burmese, the Khyeng, and the Manipuri. These twenty dialects are allied in their grammatical formation and vocabulary like the Romance languages of Europe. The affinities of the Italian, French, Spanish, and the Portuguese may well illustrate the analogies of Thibetan, Dhimal, and Burmese. The names of numerals, of common objects of sense, the organs of the body, and common actions are usually expressed by root words which are essentially the same in all. No accurate enumeration of the numbers speaking the Thibeto-Burmese languages has been made. It is estimated that fully forty million of people speak the Kolarian tongues in the several dialects, and doubtless the Indo-Chinese group is much in excess of the Kolarian.

Tribal and linguistic divisions of the Indo-Chinese.

HIGH-CASTE HINDU (ANANT RAM, PRIME MINISTER)—TYPE.
Drawn by E. Ronjat, from a photograph by Burke.

The three principal Indian races which we have here mentioned, the Dravidians, the Kolarians, and the Indo-Chinese, may all be defined as non-Aryan peoples to distinguish them from the dominant race. They do not, therefore, come distinctly within the range of the present discussion, which is intended to cover the Aryan peoples of India. But the presence of the above races among the Hindus proper, and the large degree of ethnic admixture which has occurred along all the lines of contact, make it desirable to refer in this connection to the aboriginal races, although

Dravidians, Kolarians, and Indo-Chinese are non-Aryan.

they have been deduced from a Mongolian rather than an Aryan stock.

4. *The High-Caste Hindus.*—These are the dominant nations of India. In numbers they probably surpass all the rest combined. Likewise in influence they are superior. Their intellectual, and perhaps we should say their moral, development greatly surpasses that of any other Indic people, unless we should except the Christian colonies, and doubtfully the Mohammedans. Generally speaking, the Hindus are the lineal descendants of the Old Aryans who came, in prehistoric times, into the Indian valleys and conquered and overran the aboriginal inhabitants. At what date this occurred it is not possible to determine. The Hindus themselves believe that the Vedic hymnal was composed at or before the beginning of time. Some of their philosophers, more moderate in their estimates, place the date at 3001 years before our era. The best estimate which modern scholars have been able to make fixes the minimum of 1900 B. C. as the date for the composition of the older hymns of the Veda.

Dominant Indicans are high-caste Hindus.

It is not possible to make the ethnic line which defines or includes the Hindus proper correspond with the caste lines which we have already drawn. Of course, the Brahmans are all included in the ethnic class of Hindus. The Kshatriyas likewise belong to this race; also the Vaisyas, or at least the greater portion of them. But at this point the intermingling of races begins to show its effects, for the Vaisyas have in many parts of India absorbed a considerable amount of foreign blood from the Dravidians and Kolarians. In some parts the Kolarians have made their way into the Vaisyas caste, so that at this point the ethnic line can no longer be made coïncident with the caste line between the Vaisyas and the Sudras.

Ethnic and caste lines do not coïncide.

5. *The Mohammedans.*—These came by conquest. They were originally Arabs, Afghans, Mughals, and Persians. In successive invasions, occurring at intervals sometimes of centuries, the followers of the Prophet have thrown themselves from the west into Sindh, the Punjab, and all the Northwest provinces. On some occasions the impact has carried

MUSSULMAN OF CASHMERE—TYPE.
Drawn by E. Zier, from a photograph by Burke.

Place of the Mohammedans among the Indian races.

HINDU PRINCES—TYPES.—THE MAHARAJAH AND HIS COURT.—Drawn by E. Ronjat, from a photograph by Burke.

bands of invaders as far east as Bengal. These conquests have always been accompanied with religious propagandism. Islam has borne the sword in one hand and the Koran in the other. Indeed, the impulse which has carried the armies of the Prophet north, south, east, and west from the original seat in Arabia has always been rather the spread of Islam than the mere conquest of nations.

On the whole, the Mohammedan invasions in India have by this criterion been attended with success. More than forty million of people have adopted the Arab faith, and we thus have another remarkable example of the interfusion of a Semitic religion among the Aryan races. Next to the Hindus themselves the Mohammedans are the most populous division of the Indian nations. The difference in numbers, however, between them and the non-Aryan Kolarians and Dravidians is not great, but in respect of spirit and power the Mohammedans are infinitely above the aboriginal peoples of the south. Indeed, if we regard the Islamites as a caste in Indian society, it would hardly be an exaggeration to say that in pride, arrogance, exclusiveness, and bigotry they are fairly the rivals of the Brahmans themselves. The great mass of Mohammedan population is distributed in Bengal, in Western and Northwestern India, and along the borders of those Iranian countries where the faith of the Prophet has long been in the ascendant.

We must now, however, omit the non-Aryan populations of India as the same belong to other parts of this work. We shall attempt to fix our attention more exclusively upon the descendants of the dominant race known by the ethnic name of Hindus, but classified religiously as adherents of Brahmanism. It is among the Hindus that the real power and intellectual forces of the native races of Hindustan are found. The Brahmans have in their possession not only the sacred books in which the faith of the Indians is recorded, but also the philosophy, the science, and the jurisprudence of the Hindu race. In like manner they have been the creators and the custodians of the secular literature, such as it is, and of the educational forces existent in Indian society. Their exclusive claims in all of these particulars amount to a monopoly of the real life of the Indian races.

The Brahmans represent the intellectual forces of the Hindus.

The Brahmans are close alongside the native Hindu princes, and are their counselors and teachers. Locally, they have the center of their power in the great middle region of India, just as the southern triangle has an excess of the Old Dravidian populations, and as the slopes of the Himalayas are occupied by the Indo-Burmese. The Brahmans, as the spokesmen of this dominant Hindu race, represent not only the mind, the will, the purpose, and the native power of modern India, but also the continuity of the Aryan race and the institutions of that race from the earliest epoch of human history to the present day.

CHAPTER XL.—ANIMAL AND VEGETABLE RESOURCES OF INDIA.

THE Aryans began in India as poets and warriors, and have ended as priests and peasants. The primitive aspect was one of aggression, conquest, energetic activity; the present aspect is one of submission, quiescence, passivity. There is only one point of view from which the energies of the race may be said to be unabated, and that is in the perpetual but timid industry of the people. It is now proper to review briefly the conditions of environment under which the transformation of the India of antiquity into the India of modern times has been effected.

Slight changes in the environment of the Indicans.

This vast region, a peninsula in its general form and relations to the sea, has perhaps been less affected in its original conditions of climate and physical character under the great and continuous burden of population than has any other country of like extent on the globe. The traveler, the ethnographer, the historian, is to-day able, as in the times of Alexander or in the times of the Vedic bards, to scrutinize the movements and products of physical nature essentially unchanged and but slightly varying from what they were in the time of the prehistoric Mongolian aborigines.

Vast and varied resources of the country.

India has always been a land of vast and varied resources. In the earlier ages of Aryan domination the conquerors were brought into relation rather with the animal life of the peninsula than with the products of the soil. In the beginning all people must be hunters, warriors, adventurers of the hill and jungle. Here in the valleys of the rivers, in the wooded uplands, and on the slopes of the Himalayas, steep-up to the clouds, they found a variety and abundance of animal life unequaled in any other part of the earth. It is now recognized as a fact by zoölogists that a majority of all the animals, great and small, common to the north temperate belts of the earth have their origin, or at least a native place, in India. Nearly every species of creature, from the domestic fowl to the elephant, may be found, with its pristine habits and in its original abode in the vast wilds of the Indian jungles.

Animal life of India; tigers and leopards.

To note particularly the principal animals of this great region would require a separate treatise. Here from the earliest ages the lion has flourished, and from hence the striped tiger has carried the name of Bengal to every spot on the planet where a collection of wild beasts has been established or a traveling menagerie has pitched its tents. To the present day the people, even in thickly settled districts, are in mortal dread of this formidable beast, who from the days of the beginning has been known as a man-eater. Within the last quarter of a century a single tiger has killed hundreds of people before he could be destroyed. In one instance a country having an area of two hundred and fifty square miles and thirteen villages was thrown out of cultivation and abandoned from the ravages of one tiger!

Leopards also are found in all parts of India, and being much more numerous than tigers, are on the whole more destructive of life and property. One variety, known as the Cheetah leopard, has been domesticated and trained to hunt. In the chase of the antelope this creature is used, and by its speed and activity is a powerful auxiliary to the hunter. It is said to surpass in swiftness of flight any other wild beasts in India. Its peculiarity of habit is that if it misses its prey at the first bound, it will make no second attempt, but return apparently mortified, to its master.

All the open country between the Indus and the Ganges was originally infested, and is to-day in wooded districts considerably troubled, with wolves. Of old time the antelope, the wild goat, and the hare were their prey, but with the increase of population and the spread of the pastoral life they turned to the sheepfold. Sometimes they attack man. As late as 1827 a single neighborhood lost thirty children by the ravages of wolves. Next in order may be mentioned the Indian fox and the jackal, whose hideous yell by night may be heard in most of the country districts of India. The latter animal is sought by the European huntsmen who are settled here and there in the country, for whom the jackal takes the place of the fox in the hunt of the Western nations.

Country infested with wolves and jackals.

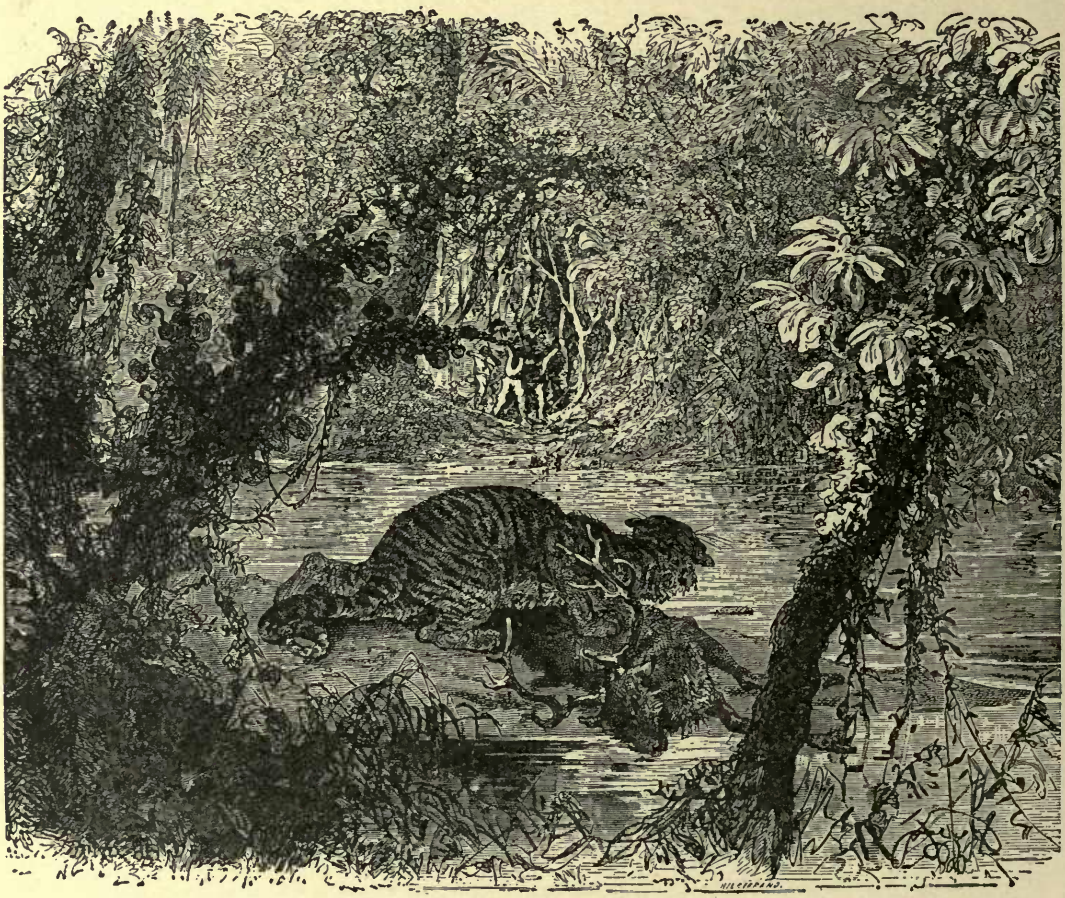
VIEW IN THE HIMALAYAS.—A MOUNTAIN VILLAGE.—Drawn by G. Vuillier, from a photograph by Baker.

Dogs, wild and tame, are numerous. The *Canis dhola* is an inhabitant of the wildest jungles. These, indeed, are his native lair, and have been so from the prehistoric ages. Of bears, there are many varieties throughout all India. The black, or sloth, bear is found in the forests and on the mountains. This is the creature so strangely marked with a white horseshoe on his breast. The Thibetan sun bear is found along the mountain spurs, all the way from the Punjab to Assam, but never at a lower level than five thousand feet above the sea. The Malayan sun bear inhabits British Burmah, along with two other species, one of which is quite small and the other almost as large as the grizzly of the Sierras.

The Canis dhola, the sloth and the sun bear.

The elephant is native to all parts of the country except the Northwest provinces. His native abode is the hill-country rather than the plains. He does not much descend into the river valleys, but takes to the higher ridges. In the southern peninsula the elephant has been nearly exterminated, but a few are still found in the forests of Coorg and Mysore, and in the states of Orissa. It was out of India that the elephants were drawn in the classical ages and trained for the shock of battle. From this source Hannibal drew his supply when Rome trembled under the march of his armies.

The elephant immemorial in India.

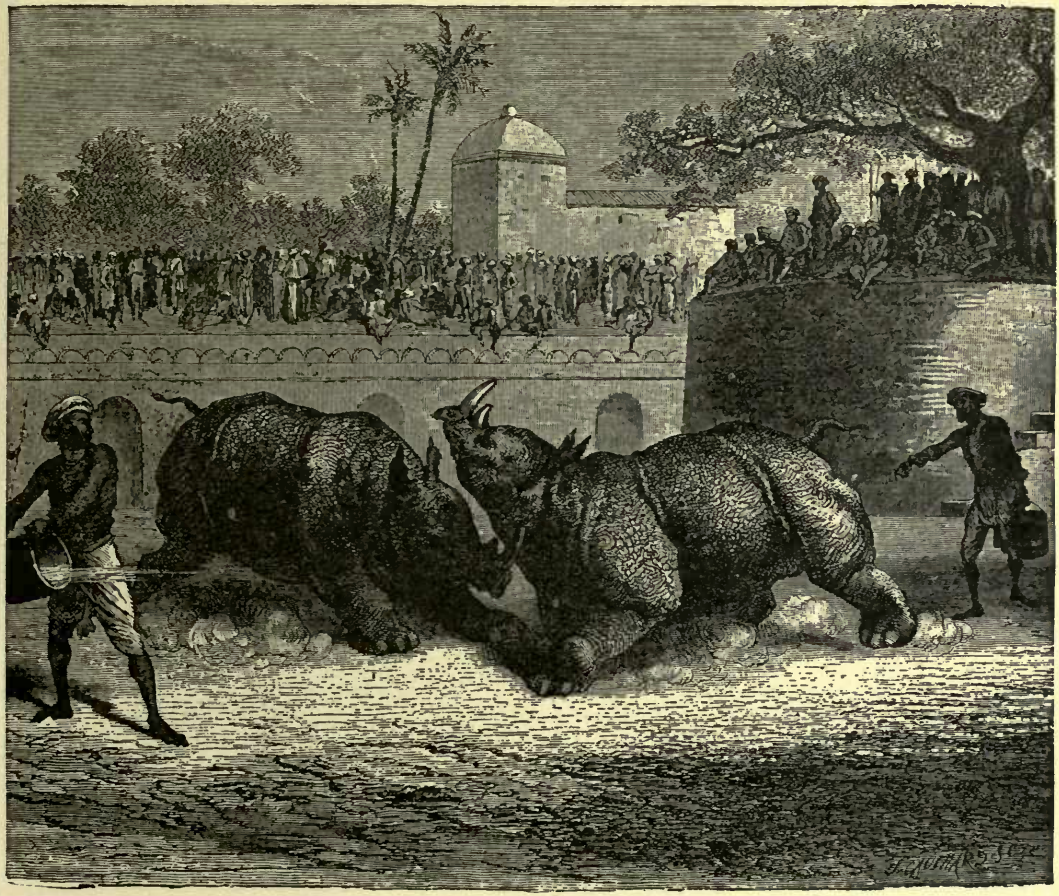


ANIMAL LIFE OF INDIA.—STAG SLAIN BY A TIGER.—Drawn by A. de Neuville, after Delaporte.

Four varieties of rhinoceros are found in India. Two of the species are unicorns, and two have double horns. They most abound in the valley of the Brahmaputra and in the Sundarbans. Its habitat is mostly in swampy places, and its manner of life like that of swine, on the slopes of the Himalayas, where some of them range as high as twelve thousand feet above the level of the sea. Here also is found the ibex, even on the highest ranges of the mountains; also the chamois, in the Himalayas, from Assam to Burmah.

The principal pachyderms and ruminants.

It would be vain to enumerate the an-



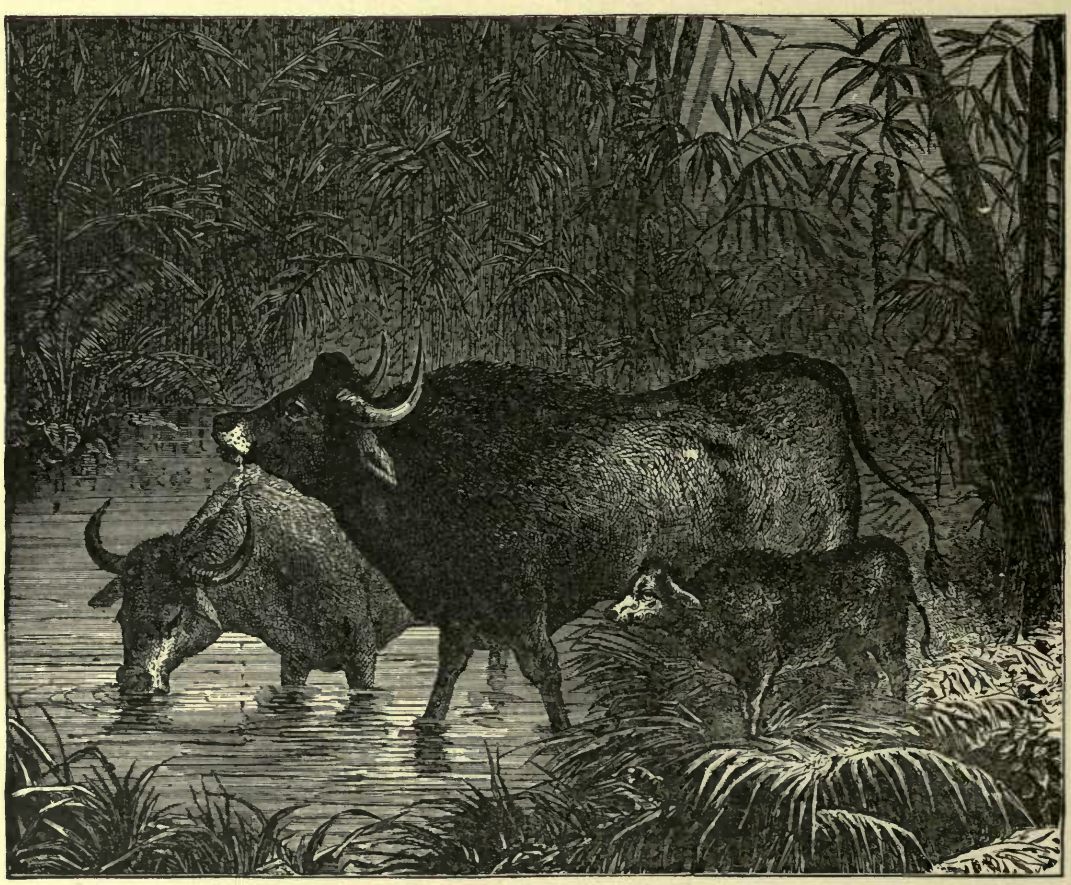
RHINOCEROS FIGHT AT BARODA.—Drawn by Emile Bayard.

or even the hippopotamus. From the earliest times the wild hog has abounded in the Indian jungles. Its habit is to hover along the edges of settlements and to gratify its predatory habits by plunging into fields and villages. In the deserts of Sindh and Kachheh the wild ass still exists, as in the times of the Aryan migration. Many varieties of wild sheep and wild goats are found telope and the deer, with its many species, the bison, from the gaur of the Western Ghats to the gayal of the north-eastern frontier. In the latter region the bison has been domesticated, and is used by the aboriginal tribes in their sacrifices. In Burmah the buffalo is found, large and fierce. The heads of some bulls captured in modern times

Habits and size of the Indian buffalo.

have been as much as thirteen feet six inches in circumference and fully six feet and a half between the tips of the horns. The animal reaches a height of six feet, and compares favorably in magnitude with the tremendous creatures formerly inhabiting the great American plains of the West.

Of birds, there are an endless variety. generally innocuous. The inhabitant of the safe countries of Europe has little apprehension of the deadly work of those Indian serpents, of which the cobra de capello is the imperial and venomous king. The fatality from snake-biting is everywhere increased by the superstition of the people, who generally regard the snake with veneration. The



INDIAN BUFFALOES.—Drawn by Mesvel.

Prevalence of reptiles; loss of life thereby.

The reptiles of India have been known from the earliest ages for their tremendous size and poisonous bite. The most deadly serpents to be found in any part of the world lurk in the dank jungles, along the river banks, and even in the uplands of the Deccan. It is said that all the salt water snakes of India are poisonous, while those of fresh waters are census of 1877 returned a total of sixteen thousand seven hundred and seventy-seven persons killed in a single year by the bites of serpents.

It is against this great phalanx of animal life, fierce and malign, that the Indian races have flung themselves for thousands of years. It has been a war at once offensive and defensive, and the battle has not infrequently gone against

the man. In no other quarter of the habitable globe does the wild animal life peculiar to the primeval world stand forth against the human race, even to the present day, in such fierce and defiant antagonism as in this thickly populated India.

It is a strange reflection that after fully four thousand years of conflict, during which the great peninsula reaching into the Indian ocean and embraced by the Indus and the Ganges has never wanted for multitudes of inhabitants, the man has not on the whole held his own against the beast. It is likely that the primitive Aryan adventurer who penetrated the jungles while the earliest poet of the Vedas was still chanting his hymns in Sindh and the Punjab, met the fierce creatures of the woods and marshes with a stronger arm and better prospect of victory than does his timid, light-limbed, brown-bronze descendant.

The Indian races have not subdued the wild beasts.

In course of time, no doubt, every species of savage creature will be exterminated from the world. The multiplication and expansion of the human family will carry the abodes of man into the reclaimed fenlands, to the river brink, through the wild morass and woodland, and up the mountain slopes beyond the line of snow. The spread of civilization, as exemplified in the cultivation of the soil, in the improved means of defense, in the scientific mastery over every element in the environment, will demand and accomplish the extinction of all the hurtful races of lower animals. In some parts of the earth poisonous reptiles and savage beasts have already disappeared.

Civilization exterminates all savage forms of life.

DEADLY SERPENTS OF INDIA.—The Bunjaris Fasciatus.—Drawn by R. Kretschner.

Even in the New World the rattlesnake, the viper, the panther, and the bear have either totally vanished or maintain a precarious existence among the mountains or inaccessible ledges of rock. The same thing will happen in India. Doubtless the country is well situated to maintain and perpetuate the wilder and more dangerous varieties of animal existence, but this condition could soon be changed by a larger expenditure of gun powder and a less supply of Brahmanism. Both of these modifications in the existing status of India will occur in

THE TIGER HUNT.—Drawn by Tanley Berkeley, from nature.

time, but perhaps the day will never come when the tradition, and even the historical record of the fierce conflict between human and mere animal life in this region of the world will pass away.

There is no more spectacular display of man's activity than in the tiger and elephant hunts of Hindustan. For how many centuries such exhibitions of natural combat have occurred it is impossible to say. The defensive fight for life with the tremendous beasts of the Indian jungle must have begun with the apparition of the human race in the valley of the Indus. Not only the battle to the uttermost has been perpetually renewed for thousands of years, but the fight for capture has brought out the ingenuity and daring of the native races, and even taxed the skill and courage of foreigners dwelling in the land. The census of 1877 showed the destruction of a thousand five hundred and seventy-nine tigers in a single year.

Spectacular character of the tiger hunt.

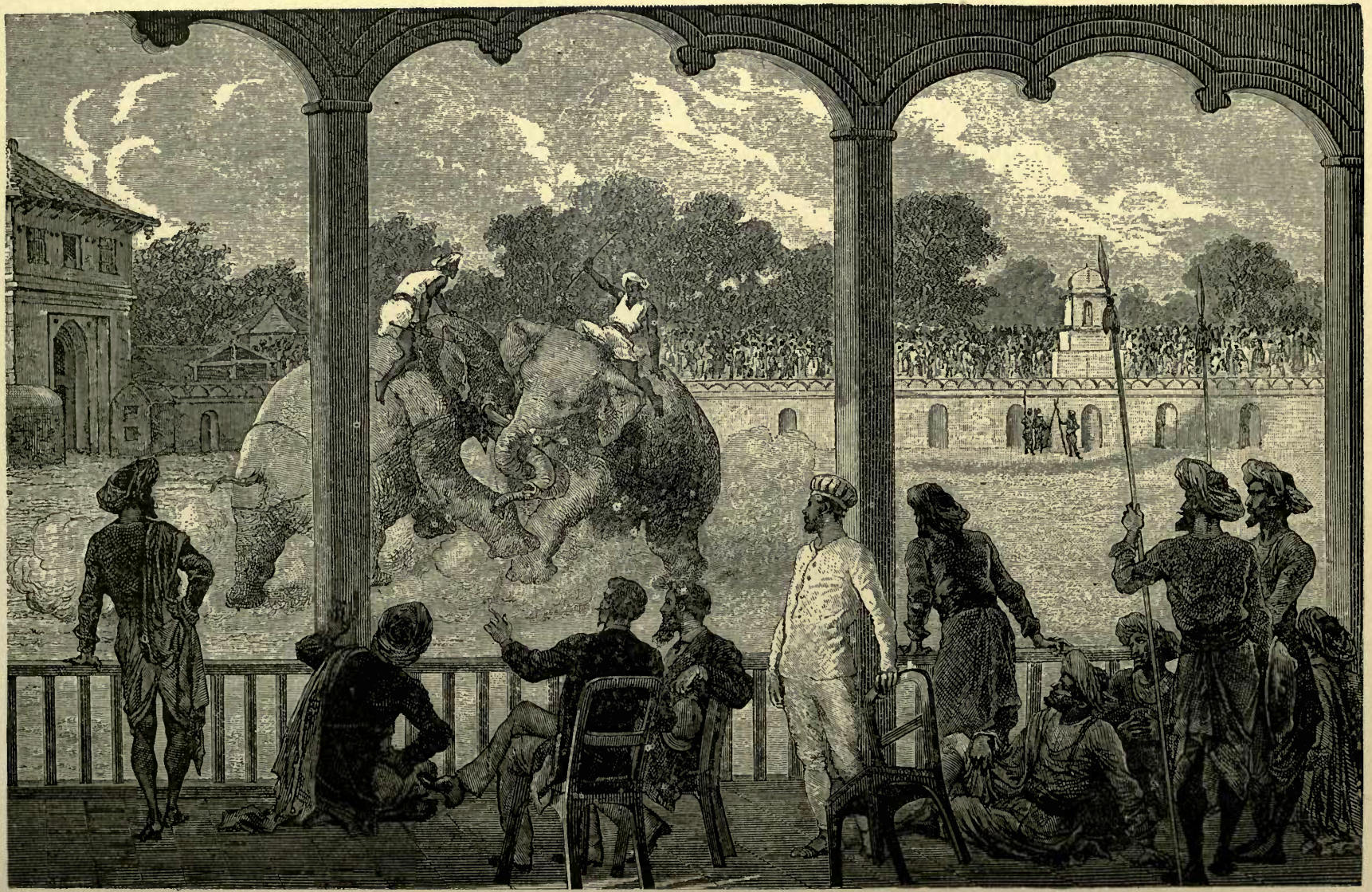
The character of the tiger hunt has taxed the descriptive pen and the artist's brush. The favorite mode is from the back of the elephant. The scene has been many times described. The hunters fix themselves with their spears and javelins and guns on the back of the huge beast and enter the jungle. The tiger is roused from his lair, and the battle begins. The elephant is trained to perform his part of the conflict. With his tusks and huge trunk made into a flail of destruction he lays about him in what is many times a vain endeavor to strike the terrible cat that springs about him. The weaponry of the Indian hunters is generally inefficient. Many lives are lost in the conflict, and the battle is usually long and evenly contested before the tiger is slain. Another method is the construction of elevated platforms, framed of the boughs of trees in a jungle, from which height the hunters fight, as from the elephant's back. The tiger, until he is wounded or has had a taste of human blood, will escape from the presence of man; but if he is hungered, or has suffered pain at his enemy's hand, or particularly if he has wet his pink tongue with a drop of human blood, he will never desist until he has devoured his enemy, or is himself slain or captured. In Assam the tiger hunt is conducted in boats on the rivers. The spearmen thus gain a great advantage by being out of reach of the bound of their enemy and having his movements impeded in the water.

Use of the elephant in hunting; the tiger's habits.

In all parts of India, except in the Northwest provinces, the elephant either abounds or may be discovered for the seeking. That part of India which furnishes the best supply is the hill-country forming the northeastern boundary between Hindustan and Assam and Burmah. Here the monster not infrequently reaches the height of twelve feet, and but for his clumsiness he would be the most formidable natural foe that man has found on the earth. The hunters must approach him on foot. Horses are generally an impediment. Several methods have been adopted of taking the elephant alive. The hunt to the death is not only dangerous in the last degree, but difficult on account of the invulnerability of the animal. Nearly all parts of his anatomy are proof against the bullet of even improved firearms. In a few spots the well-directed ball may reach the seat of life.

Native land of the elephant; elephant hunting.

Generally the killing of an elephant is a tedious and barbarous work. This is now forbidden by the government of



ELEPHANT FIGHT AT BARODA.—Drawn by Emile Bayard.

British India except in cases of necessity, but the capture alive of elephants is much practiced. The taking, however, is under strict regulation of law. In 1887–88 two hundred and sixty-four elephants were captured in the province of Assam. The profit of this work amounted to three thousand six hundred pounds sterling. It is a government monopoly. In 1873–74 Mr. Sanderson, one of the officers of the government in Mysore, studied the habit of the elephant, and devised a plan by which he captured fifty-three animals in a single hunt. The former method of taking the creature was by driving him into a pit. In this he was generally made to fall upon a sharpened stake, which worked its way into his vitals. The prevailing method is to find a company of elephants in the forest, to rouse them and drive them into a strong stockade, where they are shut up and reduced, by starvation and by the agency of tame elephants, to submission and docility. When tamed, the animals are used in the government transportation of timber and for other heavy draught and powerful exertions. They are also taught to fight, and their combats are perhaps the most spectacular and exciting contests to be witnessed in the world. Among the natives the princes and nabobs are, as they have always been, ambitious of the distinction of going about gorgeously mounted on tame elephants.

Capture alive; methods of taking and taming.

It is not to be doubted that a good deal of the timidity and fearfulness displayed by the people of India is attributable to the dangers to which they are exposed on account of poisonous reptiles and other lurking foes. The methods which they have adopted to defend themselves against such enemies are multifarious. In some districts where venomous serpents abound a plan of building is common which is determined in its main feature by the consideration of safety from reptiles. The houses are put on piles or large stakes at considerable elevation above the surface. By this means a space is left between the domicile and the earth, over which it is difficult for the fanged enemies of man to make their way. The edifice considered apart from its situation is perhaps almost identical in structure with the prehistoric lake dwellings of Switzerland.

Race timidity traceable to fear of beasts and reptiles.

The maintenance of a food-supply is the prime consideration with every people of the world. In a country like India there must needs be vast natural resources. The whole peninsula may be said to be inclined toward the sun. On the north the great wall of the Himalayas rises, and from the spurs of this immovable buttress the land slopes to the sea. In these majestic mountains are the treasures of the snow. Here scores of rivers take their rise, and southward tending combine their waters in the great streams which are one of the fundamental physical features of India.

Physical setting of India; the native land of rice.

The Indian valleys are as rich as any on the globe. Great, however, is the difference between them and the low-lying alluvium of the Nile and the Lower Euphrates. The river banks in India are marsh and jungle. Nature is rank in the last degree. Among the sappy and dense-growing products of the valleys many grains and fruits grow wild, which under the improving direction of man have become the great cereals in the markets of the world. As far back as the days of Pliny and the oldest naturalists of the Græco-Italic peoples the grain known by the Greek name of *oryza*, the modern rice, sprang

plentifully and wild in the lowlands of Southern India. Thus it grows to the present day; now the old native grain of the marshes is preferred by the native nabobs and princes to any of the cultivated varieties.

India has been regarded as par excellence the native land of rice. The belief is not warranted by the facts. True, the rice swamps of British Burmah are among the most fruitful in the world. In Rangpur eighty-eight per cent of the cultivable land is sown in this single crop. In Orissa also—as is indicated by the name of the province—and in the deltas of the Godavery, Kistna, and Kaveri, as well as in the lowlands of Malabar and Kanara, rice culture is the one predominant industry and means of support. In the Northwest provinces the grain is grown successfully, but only in damp localities. But if we look at India as a whole, rice is not the prevailing crop. In the regions adapted to its cultivation, however, the yield is immense. In British Burmah the average crop is as high as two thousand five hundred pounds per acre. In 1878 the exports of this cereal from Calcutta amounted to one billion six hundred million pounds.

Extent of the rice crop in different districts.

The rival grain of rice in India is wheat. Where the one prevails the other does not thrive. The center of the wheat-producing region is the Punjab, and it is not unlikely that here this principal food-grain of the human family was first brought out of the native state by cultivation to the perfected form which it has had for more than three thousand years. The quality of Indian wheat is satisfactory in the best markets of the world. It is accepted in the great mills of England as the peer of the wheat imported from the Danubian provinces and other favorite localities. The yield, as far as the same has been determined by census reports, is fairly good, averaging about thirteen bushels per acre for the whole area sown in India, as against fifteen and a half bushels for the whole of France.

Extent and character of the wheat product.

SCENE IN THE INDIAN VALLEYS.—Village of Pertœmbokern.—Drawn by Riou, from a photograph.

Millet is next among the field crops of India. Viewed as a food of the people, it is more employed than either rice or wheat. It is claimed that millet is the most fruitful grain in the world as to abundance, and on the whole the best adapted to tropical climates. It is the most widely disseminated of any grain grown in the peninsula. Millet flourishes from Madras in the south, as far north as Rajputana. There are several varieties adapted to the different districts, but nearly all are known as "dry crops," or such as are dependent only on the natural rainfall, while rice and many other products depend upon irrigation.

Millet the resource of the common people.

By one of the strange mutations of history and of language, that fruitful maize called Indian corn has become *Indian* in reality. It is cultivated in nearly all parts of the country, and grows to perfection. Along the Upper Ganges barley is a standard crop. In the Himalayan valleys and in the Punjab oats are grown, but as yet the cultivation of this grain is experimental in the hands of Europeans. Throughout all India the oil seeds are raised in abundance. The demand for vegetable oil in India is very great. It is used for anointing the person, for illumination, and for food. The discarding of animal fats by the people has increased the consumption of the oils produced from seeds. In recent years an export trade with Europe has sprung up, and since the oil seeds can be produced as an after crop, when rice and other grains have been cut away, the production of the oils has become a source of great profit. There are four principal seeds from which oil is produced: the rape seed, linseed, sesamum, and the castor bean. The regions in which these products are most abundant are the Northwest provinces, Bengal, and for sesamum the presidency of Madras.

"Indian" corn, barley, and other cereals.

No cursory description could do justice to the vast variety of vegetable products springing native or under cultivation in the different districts of India; and the same may be said of the fruits. Among the latter may be enumerated the mango, the pineapple, the guava, the tamarind, the custard apple, the papaw, the shaddock, and an endless variety of figs, melons, oranges, limes, and citrons. In nearly all of these fruits traces of the original native saps may be discovered by the cultivated palate, and they are doubtless not comparable for delicacy of flavor with the corresponding varieties produced by the skillful grafting and cultivation in vogue among the Western nations.

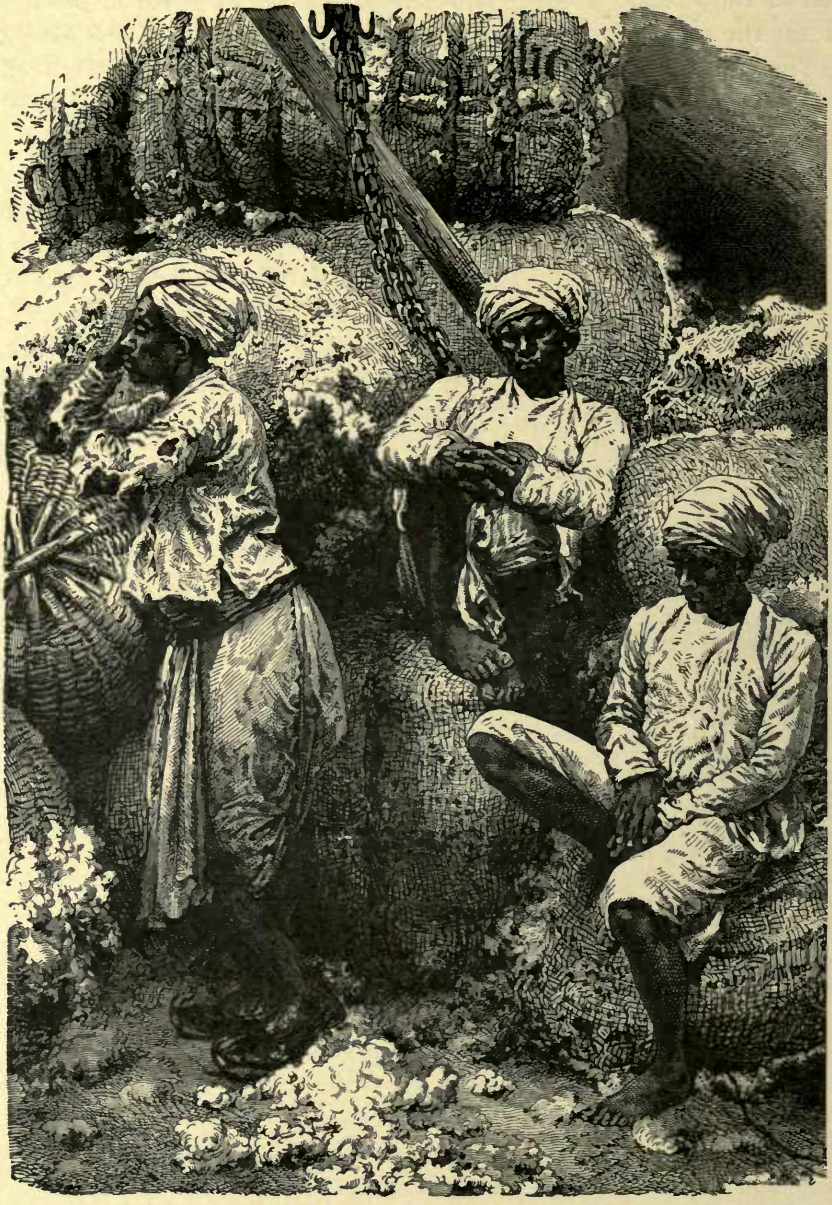
Extent and variety of the vegetable products of India.

Already, when the traveler enters India, he finds himself in the land of spices. True, the air is not yet burdened, as in Ceylon and the Celebes, with the almost oppressive odors which spring from the groves and native woods of the tropical islands; but the Indian spices are abundant and fragrant. The principal of these products are the chili, or cayenne pepper, the turmeric, ginger, coriander, aniseed, and black cumin. Pepper is mostly produced along the western shores of Southern India, in the region known as the Malabar Coast. The spice called cardamon belongs to the same locality, but is also produced in Nepal. Betel nuts are grown in the deltas of Lower Bengal and in other parts of Southern India.

Abundance and distribution of the spices.

In all the more tropical parts of the country the palm flourishes. Dates have been plentiful from time immemorial. Three varieties are found: the true date,

the palmyra, and the bastard. From the last named is manufactured the Jaggery sugar of commerce; also an intoxicating liquor, which is doubtless identical with that described by Xenophon in the *Anabasis*. The true date flourishes in Sindh and the lower districts of the Punjab. Along the western coast of India the cocoanut is not only plentiful, but abundant, ranking as a product next in value to rice. Sugar is produced not only from the bastard date palm, but also from sugar cane, which flourishes in the Northwest provinces. It requires irrigation, however, and is otherwise expensive in production. The manufacture of sugar has remained in the unskillful hands of the natives until in recent times, when facilities for making it have been produced in the Madras presidency and in Mysore.



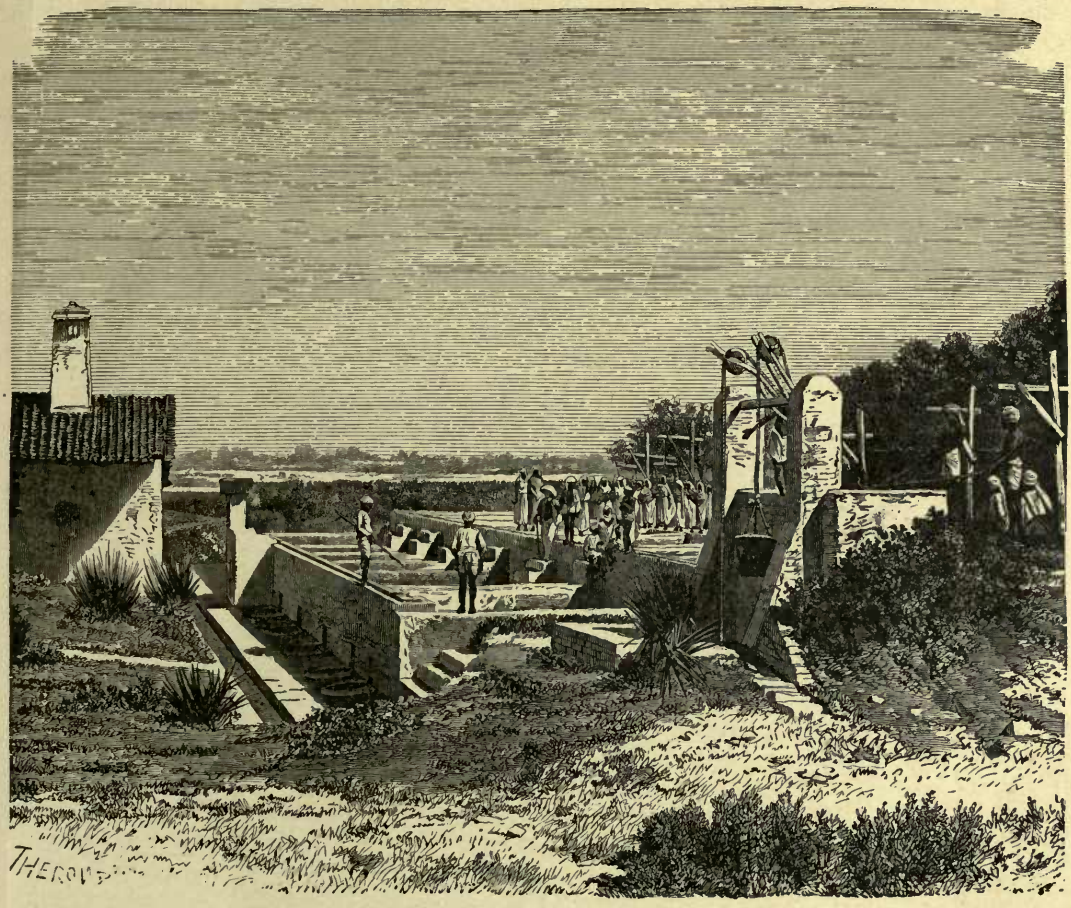
COOLIES AT THE COTTON MARKET IN BOMBAY.

The cotton plant is also a native of India. It has been found from the earliest times, and the product has supplied the local wants of the country within the historical era. Until the last century cotton was not exported as a product from India. Here we touch upon that remarkable circumstance in the commercial history of modern times, balancing and unbalancing the cotton trade of the world during the American

Varieties of dates; sugar and the sugar manufacture.

The Indian cotton crop and Western interests.

Civil War. It will be remembered that in Lancashire, England, seat of the great cotton factories of the United Kingdom, a crisis was reached in 1861 by the closing of the ports of the confederated Southern States. The American market was thus hermetically sealed, and the English factories suddenly stopped for want of raw material.



INDIGO FACTORY AT ALLAHABAD.—Drawn by E. Therond.

At this juncture Great Britain turned eagerly to the cotton fields of India. With an open market, the quality of cotton produced in the East was not equal to the American product, and could not be, but in this time of extreme stringency it sufficed to supply the demand. Prior to 1860 the average Indian exportation of cotton had been less than three million of pounds a year, but the cotton industry suddenly sprang up under the tremendous stimulus, until 1866, when the exportation amounted to thirty-seven million. With this year, however, the stress was removed by the opening of the American market, and the Indian exportation immediately fell off to eight million a year. Perhaps no other world market of a great product, balancing at its two poles eight thousand miles apart, has ever exhibited so remarkable a fluctuation.

Cotton production stimulated by the American Civil War.

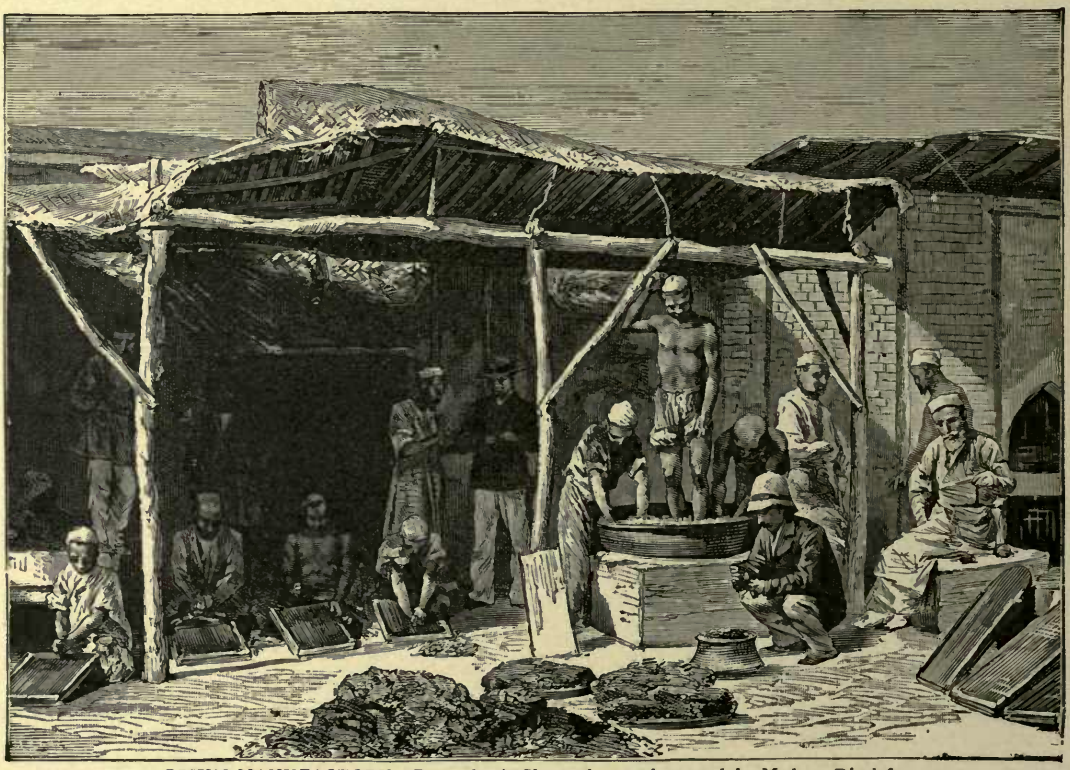
Next after cotton may be ranked the jute of India. It is virtually a hemp, though the fiber is somewhat coarser. The region of its production is confined

to Bengal, on the north and east. The chief seat of the product is in the valley of the Brahmaputra, where the jute flourishes in the highest degree. It is believed that no other product which has reached to the rank of an important export has done so much in a reäctionary way for the comfort of the producers as jute. It is one of those peculiar products which does not perish when placed in depot from season to season, and the supply, therefore, may be regulated by the producer according to the demands of the market. In 1872 a million acres were planted in jute, and it is estimated that the area of country in which it may be profitably produced extends to over twenty million of acres. The export from Calcutta has amounted in a single year to more than four million pounds sterling.

The jute industry; extent of the product.

Of the purely European products which have been introduced into India, indigo is entitled to the first rank; but the interest in it has declined in the last quarter of a century. In North Behar the industry is as important as ever, and from this single district about half the product of the entire country is derived. The exports of the dye from all India amounted in the years 1878–79 to nearly three million pounds sterling.

Large place of indigo in Indian commerce.



OPIUM MANUFACTORY.—Drawn by A. Sirouy, from a photograph by Madame Dieulafoy.

But the most profitable of the East Indian industries, so far as exportation is concerned, is that of opium. The valley of the Ganges and the table-land of Central India are as much a native place of the opium-producing poppy as is Persia herself. The production of opium in India is under the control of the government. In some districts the growth of

Extent, importance, and places of opium production.

the drug is free, and the opium is subjected to a duty in passing through Bombay for exportation. In the valley of the Ganges the product is under supervision of government agencies established at Ghazeepur and Patna, and at these two places the opium is manufactured for exportation. In Rajputana and the Punjab the drug is also produced, but only for local consumption. In the other provinces under the dominion of Great Britain the production of opium is prohibited. The census of 1872 showed an area of five hundred and sixty thousand acres in poppy cultivation. The revenue derived by the government in this year was over four million pounds sterling. In 1878–79 the exportation had risen to a value of nearly thirteen million pounds, and from this a net revenue was derived by the government of seven million seven hundred pounds sterling.

The tobacco plant grows everywhere in India. It may be said to flourish; all the natural conditions for the product are favorable; but the quality of the leaf has never found favor in the markets of the world. Indian tobacco is unable to compete with the richly flavored growth of the West Indies and the United States. Tobacco is grown, however, in all parts of the country for native consumption. In the Coimbatore and Madura districts in Madras the variety

TEA PLANTATION IN THE VALLEY OF KANGRA.—Drawn by Paul Langlois, from a photograph.

Indian tobacco; inferiority of the product.

of the plant from which *Trichinopoli cheroot* is manufactured, flourishes, and this is the only tobacco product which competes with that of the West in the markets of Europe. There is, however, an exportation of tobacco from Bengal into British Burmah, where the plant does not flourish. Notwithstanding the wide distribution of the growth of tobacco in India, the importation at Calcutta has amounted to forty million pounds in a single year.

Neither coffee nor tea may be regarded as native products of India. The former has been introduced within the historical period by the natives, and the latter at a time still more recent, by Europeans. The cultivation of coffee is limited to a portion of the Western Ghats and to certain districts in Mysore and Madras. The export of coffee in 1878–79 was valued at a million and a half pounds sterling. The reports of early explorers that the tea plant grew wild in the southern valleys of the Himalayas were without foundation in fact. It is only in Assam that the true *Thea viridis* will flourish without cultivation. In this region it attains the proportions of a real tree, and it is believed by botanists that here is the native place of the plant, and that it was carried hence in early times into China.

Coffee and tea not properly native to India.

Many other products of great importance might be enumerated as belonging peculiarly to India, but the above are sufficient to indicate the general character of the grain and other animal and vegetable resources of the country. In general, everything is rank. The high heat and abundant moisture in the valleys stimulate vegetation, and bring all manner of fruits and grains to early maturity. Three crops annually are not unusual on the same fields. In the greater part of the country the winter is not sufficiently rigorous seriously to impede the work in fields and gardens.

Indian vegetation favored by stimulating conditions.

The rainfall ranges from twenty-four inches in the drier districts to nearly one hundred and twenty-three inches in the rice regions of the south. The rains are periodic, being the result of the monsoon, or sea wind, which blows steadily at certain seasons, bringing on and maintaining a steady and copious rainfall. It is from the occasional, though rare, failure of this monsoon that famine has at intervals possessed the land. In the years 1876–78 nearly the whole of India was afflicted by the partial or total failure of crops. In 1877 the death rate rose, on account of the famine, from six hundred and eighty thousand to a million five hundred thousand. The most strenuous efforts of the government were not sufficient to prevent widespread and dreadful starvation. For two years the monsoons failed to return at the appointed season, and the country was helpless in the grip of drought.

Precipitation and its relations to the death rate.

We are now able, from a wide view of the resources of India, of the character of the race predominant therein, of the effects which climatic and other physical conditions naturally entail on man, and of the contact and intermixture of different races, to estimate, though imperfectly, the nature and direction of the human evolution, and of the aspects which mankind would be likely to assume under such conditions and environment. On the whole, we should expect a certain degree of physical degeneration. That the climate of India is effeminating in its effects on man has been plainly demonstrated by actual observation in modern times. It

Physical degeneration resultant from conditions present in India.

is a general law that the subsidence into agricultural life from the nomadic pursuit, with its accompanying excitements of the chase and tribal warfare, exercises a deleterious effect on the physical constitution of man. It is a change from a wider and freer and less toilsome mode of activity, from a life of hazard and wild excitements, to the more localized and more laborious methods of the husbandman. It is not meant that the agricultural life is without great value in maintaining the physical vigor of those who follow it, but the toil and tameness which are inseparable therefrom are not favorable to the highest development and greatest vigor of the human frame.

We are here again on the very border of that world-wide problem of the relative effect and value of the different foods in sustaining the vigor and extending the activity of human life. What may be called the science of diet is still in its infancy. To no class of students is the subject of greater interest than to those who are curious in historical and ethnic inquiry. What is the law of the maintenance of life by food? What shall be eaten as most conducive to strength, to longevity, to the support of all the virile energies of man? What may be known scientifically on this subject over and above that simple folklore which the untutored experience and tradition of human kind has transmitted to our age?

Importance of food-supply in relation to race character.

ASPECTS OF INDIAN LIFE.—REPOSE AT NOONDAY.—Drawn by F. Regamey, from nature.

Foods have been subjected to a scientific classification. They are divided by physiologists into *hydrocarbons*, *carbohydrates*, and *nitrogenous foods;* and it is now well ascertained that each of these

classes of aliments has its particular value and relation to the physical constitution of man. The characteristic of the hydrocarbons is the presence and excess of oil. This generally exists in the form of animal fats, though oil is also a large product of the vegetable kingdom. But the most concentrated and characteristic development of this food substance is in the fatty tissue of animals. From the earliest ages men have used this substance for the support of life. It is, however, in the more rigorous climates that the appetency of the human being for animal food of this description is most intense. There is a law of natural selection which indicates a diminishing quantity of the hydrocarbons as the human race spreads toward the tropics. There is little or no natural appetite for animal oils in the warmer climates.

Classification of foods; the hydrocarbonates.

The second class of foods are the carbohydrates. In these there is an excess of starch or sugar, just as in the hydrocarbons there is an excess of oil. The cereals and certain ground products, such as the potato, may be taken as the standard examples of the carbohydrate foods. Rice is of this kind par excellence. It will be seen at a glance that the great products of the earth generally yield a high per cent of starch, and in so far as the productive regions of the globe lie within the temperate zones and become more intense in productive energy in the tropics, to that extent the starch-bearing foods are prevalent in the same regions. In general, the line between the hydrocarbon and the carbohydrate aliments, upon which for the most part all animated forms of existence are sustained on the earth, is practically coïncident with the line which divides the animal from the vegetable kingdom; that is, the fat-bearing animals from the field products and ground crops, which are starch-bearing.

The carbohydrates; what foods constitute this class.

The third variety includes the nitrogenous foods. All highly organized tissue, whether animal or vegetable, contains a percentage of nitrogen. This is generally the fourth element in the quadruple compounds which constitute so large a part of the organic substances of the material world. Nitrogen occurs in all leguminous plants and grains, and particularly in the muscular fibers of all animals. It is a principal constituent of "lean meat," its presence being as constant and conspicuous in such fiber as is carbon in the fats and oils. Among vegetable products all pulse grains, such as peas and beans, are rich in the same element.

The nitrogenous class, and foods containing phosphates.

Besides the three general classes of foods here enumerated, there is a fourth class, though scarcely distinct from the others, in which certain valuable salts are the meritorious element. These are principally the phosphates of lime, of potash, of soda, and of iron, without which as constituents of human food the nervous energy of the body can not be long sustained. These salts are distributed in both the animal and the vegetable kingdoms, perhaps more plentifully in the latter (?), and it is now a well-known fact that the nervous vigor of animals turns largely upon the percentage of the phosphates in the substances upon which they feed.

Now it is the adjustment of the human race to these different classes of foods, as well as to the different climates of the earth, that determines the race tendency of every people. This is said, first of all, of the physical constitution which

Race character dependent largely on the kind of food.

DYERS OF LUCKNOW.—Drawn by A. Duvivier.

will be developed in a given environment, and afterwards of the modes of activity and mental dispositions which the given people will display. In a country where muscular exertion is essential to life and welfare, and where man must brace himself stoutly against the opposition of the elements—must face angry vicissitudes of climate and season, the hardships of sterility, the obstacles of heavy forests and oozy rivers with undetermined channels—there must needs be a perpetual feeding upon those elements of nature which furnish the essentials of human energy under such conditions. Here it is that man must fill himself with an abundance of solid food. Under the action of an untutored instinct at first and the discipline of right reason afterwards, he slays the living creatures and eats their tissues and the fat.

The office of hydrocarbonaceous and nitrogenous foods.

It is in the nature of the hydrocarbon foods to supply him with heat. That is the physiological office of all the oil-producing substances of the vegetable kingdom, and particularly of the fat of animals. By this means the superior races feed the fires of life amid the rigors of northern climates. There is an aspect in which man may be viewed as a living furnace. His stomach is a firebox; and nothing that he can cast therein flames like oil. Thus he warms himself, and goes abroad unharmed amid the terrors of the high latitudes, where all forms of life not supported like his own must inevitably perish. But he not only feeds himself with oil. If he is in a region where active exertion is demanded, where the excitements of the chase, the adventures of the wide campaign, the struggle with the obduracy of physical nature, and particularly the flaming excitements of war call out his energies, he must support his muscular system with an abundant supply of nitrogenous foods. Hence he falls upon and devours the dry meats and the fresh tissues of slain animals, and from this source builds up anew the broken structure of his own muscles, exhausted by toil and strain.

In what relation the carbohydrates are naturally used.

The kind of activity contemplated under the stimulus of foods like those we have here described is not the activity of mere industry. There may be long continued assiduity of application to industrial pursuits without that kind of muscular destruction, without that combustion of the hydrocarbons, which is here delineated. The agricultural life in its milder aspects does not demand the high feeding that is an essential in heroic endeavor. It requires rather a certain steady force, such as is generated from the carbohydrate elements. All agricultural countries fall to the use of grains and vegetables, and to a certain extent abandon animal food. In proportion as the country lies well to the south, the relinquishment of the hydrocarbons will be more complete, and food will be almost exclusively drawn from the field, the orchard, and the garden.

Effects of such foods on the human constitution.

These carbohydrates are the producers of force. The starch foods taken into the human constitution pass by metamorphosis into sugar and from sugar into oil. In the last named form they are consumed. He who demands simple working energy without regard to the waste of his muscular tissue will turn instinctively to the cereals and fruits. Ultimately this tendency lands on rice and potatoes. In countries where nature brings forth abundantly of the cereals, where all ground crops are plentiful and fruits abundant, there will be *an inevi-*

ASPECTS OF INDIAN LIFE.—Dance of the Bayaderes.—Drawn by F. Regamey, from the scene.

table shrinkage of the muscular parts of all animals. Man subsisting on such a food will become assiduous in his application, even persistent in his pursuits. He may be lithe and active, supple-jointed and quick in movement, but he will be essentially weak in his skeleton and muscular structure.

Here we have the fundamental conditions which have divided the Aryan race in India from the Iranians and from the great races of the West. The Hindu body is the result of a long discipline in the hands of nature. It has been constituted under the enervating influences of a semitropical or wholly tropical climate, combined with the results of the substitution of the carbohydrates for the hydrocarbons and nitrogenous foods of the great northern peoples.

The Hindu body the result of the long discipline of nature.

HINDU JEWELER AT WORK.
Drawn by A. de Neuville.

As the man is individually, so is his tribe, his nation, his race. India is not wanting in the display of active and persistent industry, but the industry itself is as feeble as it is persistent. The tremendous energies displayed by some of the Western nations in their masterful struggle with an adverse environment in subordinating the forces of nature, in organizing the astounding apparatus of commerce, in planting political dominion even at the distance of thousands of miles from its central source, are set in vivid and exalted contrast with the timid and effeminate exertions peculiar to the same stock of men as they have grown into mere suppleness under the influences of the Indian sun and the enfeebling tendency of the starch-bearing foods.

Same laws hold of the race as of the man.

One must needs travel through the Indian kingdoms to be properly impressed with the physical character of the people. The high-caste Brahmans, especially in the north, have preserved to some extent the fine stature and manly bearing of their Aryan forefathers ; but as a rule, the people are not only low, but slender. They are weak-muscled, and have nothing left of that aggressive physical force which the old stock possessed in its ancestral home and which has been so strongly developed in the Indo-Europeans of the West. It is claimed that Hindu laborers are as industrious as any in the world. Their assiduity can not be denied, but assiduity is not strength. The race is weak. It lacks in courage and audacity. It has fallen into a

Weakness of the Hindus resultant from sustenance and climate.

passive condition which has in it neither power nor progress.

Ethnic life the joint product of subjective and objective conditions.

It is held by a certain class of thinkers that no people can ever be powerful and progressive whose principal subsistence is on rice and other starch-bearing products. This is looking at the problem of life as merely a physical phenomenon. It does not take into consideration those other elements which we have previously discussed. It is sufficient to repeat that a race of men as it presents itself in modern times is the *joint* product of two principal forces, one of which is subjective or instinctive in the race itself, and the other an objective, or reäctionary physical force, including the elements of climate, food, and shelter. The Hindus have been thus evolved from the old prehistoric condition in which we beheld them in their Iranian homestead and in their migrations to the East. They have been carried forward on the line of race development by the force of instincts which have determined in large measure their mental and moral characteristics, and by physical agencies which have given to the race its visible aspect and character.

Precious stones in relation to race character.

Among the other physical conditions that have modified the race constitution of the Hindus may be mentioned the peculiar minerals of the country. In ancient times, and to a limited extent at the present day, India is the country of precious stones. Besides the usual deposits of the metals which provoked at a very early day a considerable degree of skill in metallurgy, the diamond mines and other deposits of those rare stones which have been classified as precious have attracted the cupidity and excited the pride of the Hindu race. Without diamonds and other gems of great value such a thing as Oriental magnificence could hardly exist. Barbaric state, such as Eastern monarchs in the Middle Ages and even in modern times are wont to maintain and which constitutes so large an element in personal despotism, could hardly continue without the blaze of precious stones. Indeed, no civilized society in the world has as yet freed itself from the illusion of diamonds. The name of Golconda, the old capital of the Deccan, has passed into the literature of all nations as a synonym for that kind of splendor which blazes from precious stones.

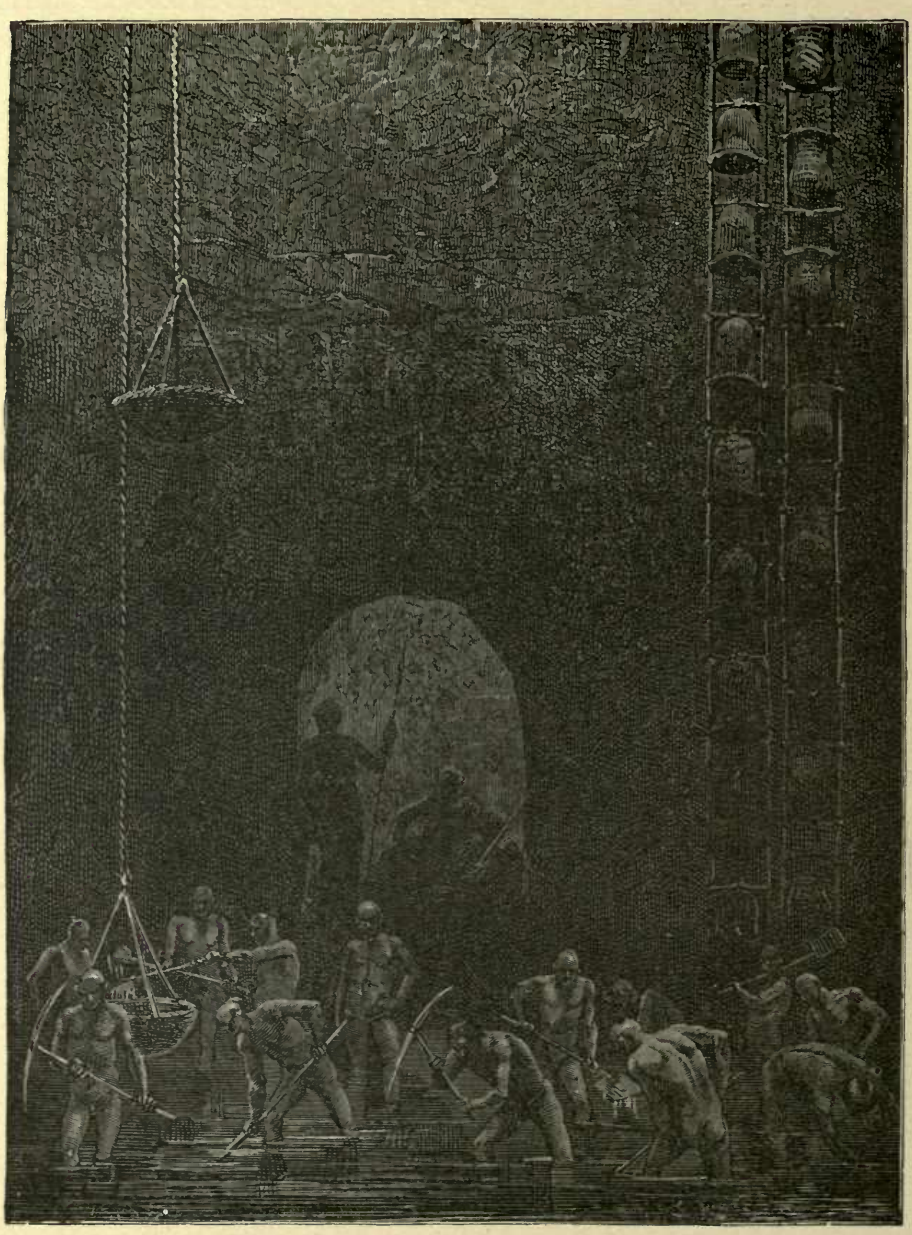
Golconda the seat of diamond gathering and stone-cutting.

True it is that recent investigations have destroyed a part of the traditional glory possessed by this city as the native place of diamonds, but it was nevertheless the greatest seat of gem-cutting and precious stone work known in the Middle Ages, and perhaps in the history of the human race. Not without its effect upon the character of the Hindus as a people was the gathering, the wearing, the exhibition, and the commerce in precious stones. All this imparted much of the Oriental character to Indian civilization. The nabob of to-day has many traits which depend, if not for their existence, at least for their manifestation, on the presence in his country of precious mines, with the treasures of which he maintains his grandeur and pride. It was this form of barbaric magnificence which contributed to Milton's pictured page one of his gorgeous images:

> "High on a throne of royal state which far
> Outshone the wealth of Ormus and of *Ind*."

The attention of the reader has been called to the fact that iron is the last of the great metals now in use to be discovered and extracted from the matrix.

The forbidding and refractory character of the ore impeded the manufacture of iron until long after the other metals the most useful of the metals. Iron mines abound in all parts of India. There is scarcely a district between the



DIAMOND MINE OF PUNNAH.—Drawn by Emile Bayard.

that exist in the native state had been brought out and employed in the arts. It was in this land of India that the Aryan race first succeeded in mastering the difficulties in the way and brought forth mountains of Assam and the southern parts of Madras in which mines are not abundant. The ore is purer than that of almost any other region in the earth. It is this circumstance, together with the antiquity and ingenuity of the race, that

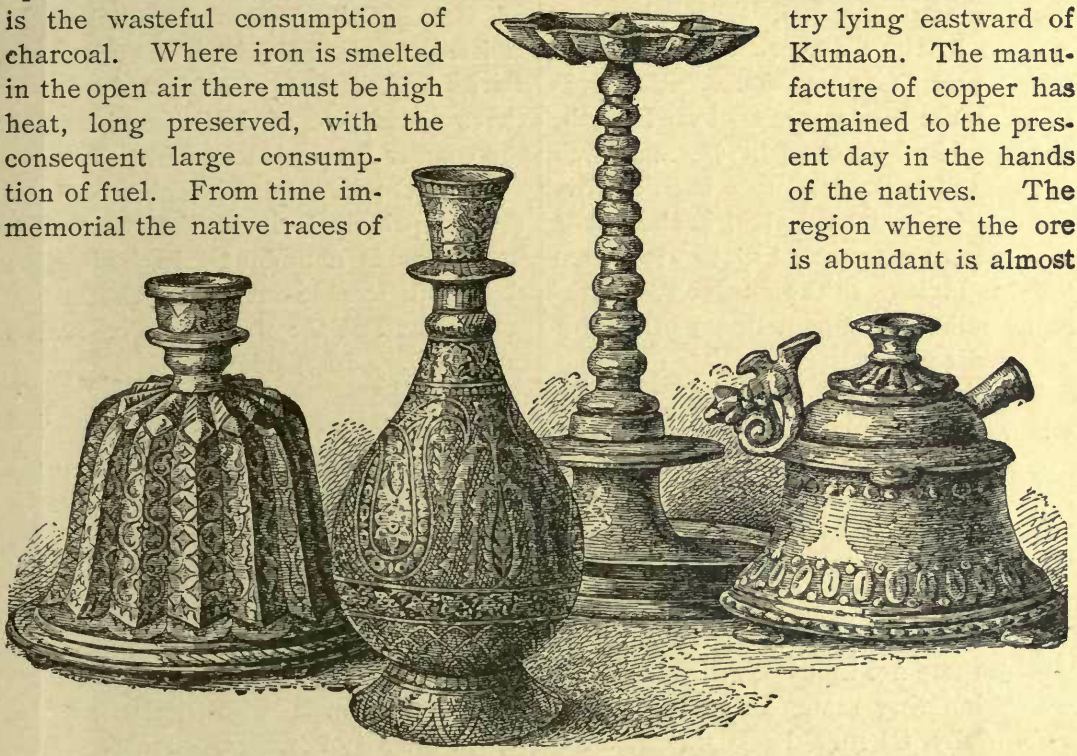
The working of iron originated in India.

has made India the first country of the world in which iron has been manufactured.

Method of smelting and excellence of product.

The indigenous method of smelting the ore is still preserved. The very same processes which were employed at the beginning of the historical era are still in vogue. The great drawback upon the success of the method employed is the wasteful consumption of charcoal. Where iron is smelted in the open air there must be high heat, long preserved, with the consequent large consumption of fuel. From time immemorial the native races of India have succeeded in producing one of the purest and best articles of wrought iron known to men. Since the creation of the East Indian empire, much foreign capital has been expended in establishing works and collieries in the country; and modern science applied to the problem of extracting the ore has greatly increased the quantity, but not the quality, of the metal. It was after the incoming of the Aryan population into India that the manufacture of iron was discovered. It does not appear that this metal was in use before this time. From India the knowledge of the processes of smelting the ore, and the superiority of the metal thus obtained over every other employed in the arts, was in course of time recognized even to the extreme limits of Europe.

Copper mines are also frequent in India. The best of all are found in the skirts of the Himalayas, in the hill-country lying eastward of Kumaon. The manufacture of copper has remained to the present day in the hands of the natives. The region where the ore is abundant is almost inaccessible, and the capital of the West has not yet made its way into the country. The deposits are worked by the miners of Nepal, according to the methods which have become traditional through lapse of time. In many districts old abandoned copper mines are found, indicating the antiquity of the knowledge of copper in India. The process of working is primitive and simple. Holes are carried into the earth, following the vagaries of the deposit,



COPPER VESSELS OF HINDU WORKMANSHIP.—Drawn by Schmidt, from the originals.

Mining of copper and method of manufacture.

until the region is burrowed as if gigantic conies or rabbits had selected the place for their cities. When the ore is taken out it is pounded up with an iron sledge and smelted on the spot of its delivery.

It is not needed that the lead mines of the Himalayas and the Punjab should be described. Tin is found in Burmah, where the ore runs as high as seventy per cent of pure metal. The mines are worked by the Chinese, with whom all improvement is innovation. Antimony is found in the hill-countries of the Punjab, and also in Mysore. In Burmah rich deposits of petroleum have been discovered, and the annual yield in the hands of European enterprise has risen to eleven thousand tons. In the Punjab the petroleum wells are managed as a branch of the public works.

The Indian lead mines; antimony and petroleum.

The river beds of India are generally laid with a nodular form of limestone. This rock has subserved the usual purposes from the earliest ages. At the present time it is taken up and employed in large quantities in macadamizing roadbeds. In the Khasia hills in Assam there are limestone quarries from which building material has been immemorially taken. In Bankura, also, there are valuable ledges of the same stone. The lower valley of the Ganges has suffered the same inconvenience as did that of the Euphrates and Tigris after their descent to the alluvial plain. In the Ganges valley there is no limestone, nor indeed any adequate building materials. The soil, moreover, is not suitable for the manufacture of either bricks or pottery. Since the domination of Great Britain was established in India, pottery works have been built in Bardwan, but these are devoted only to the manufacture of drainage pipes and the coarser form of stoneware.

Distribution of stone; soil not suitable for pottery.

In all the vast upland region between the two principal rivers of India, building stone is abundant. In Rajputana that pink marble out of which the old temple and palace of Agra were reared is found. In Godavery and Narbada sandstone abounds, and Southern India is rich in granite. Since the incoming of European capital the slate quarries have been opened, also mines of mica and talc. Finally, the hills of Orissa and Chuta-Nagpur abound in a variety of indurated potstone, out of which vessels of utility and others of ornament are manufactured with that skill for which the art of India is famous.

Quarries of marble, slate, and mica.

CHAPTER XLI.—ETHNIC CHARACTERISTICS.

WHEN a race of men has long occupied a land so varied in its resources and physical character as India, it is natural, inevitable, that there shall be a diverse ethnic development. The people of one part of the country will be formed upon conditions different from those in another. In the case of a stock so conservative as that which peopled India, the diversity of social forms and of ethnic character would be strongly marked. After the settled estate had once prevailed among the tribes, each would develop on its own lines and reach

Diverse development follows long occupancy in wide countries.

a different result. The absorption of the aboriginal population would greatly contribute also to the divergent tend-

কেননা ঈশ্বর জগতের প্রতি এমত প্রেম' করিলেন, যে আপনার অদ্বিতীয় পুত্রকে দান করিলেন; যেন তাঁহাতে বিশ্বাসকারি প্রত্যেক জন বিনষ্ট না হইয়া অনন্ত জীবন পায়।

SPECIMEN OF SANSKRIT.

ency. In a preliterary age dialectic tendencies would shoot out over the surface like growing vines, and in course of time the inhabitants of one district would no longer understand the vernacular of another.

In India these dialectic departures were all made from the common linguistic form called Sanskrit. It was that sacred primitive language which grew to maturity of grammatical form and into a fixed vocabulary on the tongues of the Vedic poets. The speech once established in structure and phraseology in the sacred hymns would no longer suffer inflection, no longer present the phenomena of growth. The Old Aryan tongue became crystalized in the Vedas. It was *Sanskrâta*, the "perfect speech." And to speak the truth, among languages developed into literary form by the genius of man, only the Greek is able to compete in the perfection of its structure and methods with the old Sanskrit as it was uttered two thousand years before our era by the Vedic bards.

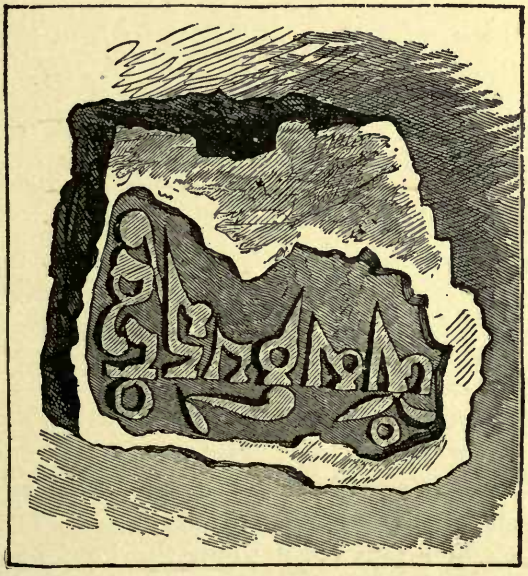
Sanskrit the original of the Hindu languages.

This old Sanskrit literature has disseminated through all the Aryan tongues of India a common element to which we may give the name of *Hindi*, the language of the Hindus. This Hindic element in the tongues of Hindustan is much like the Latin element in the Romance languages of Western Europe and South America. As the scholar wanders through France and Italy, through Spain and Portugal, through Wallachia and Brazil, he sees and hears evermore the movement and rhythm of the old Latin tongue out of which the vernaculars of all these people have grown into literary forms, diverse among themselves, but common in a single origin. So also with the Hindic element in the languages of India.

Hindi corresponds to the Latin stage in Western development.

As are the languages, so are the peoples. Perhaps the first and most distinct ethnic division of the Indic race is the Cashmerians. They are the best representatives of the early Indicans, and through them the clearest retrospective glance may be had at the race character of the original Aryans who peopled the Punjab. Only in one respect do the Cashmerians fail best of all to represent and reflect the ancient and essential character of the Indic branch of the Aryan family of men. In religion they

Cashmerians well represent the early Indicans.



SACRED INSCRIPTION FROM THE VEDA.

have largely apostatized from Brahmanism and accepted the faith of the Arabian prophet. They have thus become in-

fected on the religious and linguistic side of their development by foreign influences deduced from the Arabian desert, from Islam, from Shem.

The Cashmerians are the most northerly division of the Hindu race, being above the inhabitants of the Punjab. They have developed their own tongues, their own manners, their own institutions, having, of course, a common basis with the other Hindu races. Many of them have retained the old faith of the Brahmans.

क्योंकि ईश्वरने जगतको ऐसा प्यार किया कि उसने अपना एकलौता पुत्र दिया कि जो कोई उसपर विश्वास करे सो नाश न होय परन्तु अनन्त जीवन पावे। 1

ਕਿਉਂਕਿ ਪਰਮੇਸ਼ੁਰ ਨੈ ਜਗਤ ਨੂੰ ਅਜਿਹਾ ਪਿਆਰ ਕੀਤਾ, ਜੋਉਂ ਨੈ ਆਪਣਾ ਇਕਲੌਤਾ ਪੁਤ੍ਰ ਦਿੱਤਾ; ਤਾਂ ਜਹੋ ਜੋ ਉਂ ਪੁਰ ਪਤੀਜਦ, ਤਿਸ ਦਾ ਨਾਸ ਨਾ ਹੋਵੇ, ਸਗਹਾਂ ਸਦੀਪਕ ਜੀਉਣ ਪਾਵੇ। 2

VARIANT FORMS OF SANSKRIT.
1. Hindi; 2. Punjabi.

Climate and environment have preserved the race integrity.

Perhaps the climate of Cashmere has been more favorable to the maintenance of the original character of the race than in any other district of India. The range of the thermometer does not reach above eighty-five degrees F. at noon in summer time. The heat, however, is oppressive, owing to the stillness of the summer air. In winter the temperature sinks much below the freezing point, and snow is abundant. The conditions are such as to favor physical perfection. The Cashmerians are not only the handsomest of the Indian races, but are fairly esteemed among the peoples of the West. The men are tall, sinewy, and robust. It is conceded that the complexion of the women is one of the best, if not the fairest, in the world, and the female features possess many other elements of beauty.

Intellectual and social life of the Cashmerians.

The people of Cashmere are noted for their gayety of demeanor. They are fond of pleasures. Music and dancing are the prevalent amusements, but literature, especially in the form of poetry, is cultivated. The Cashmerians have obtained, and perhaps retained, one of the worst reputations as it respects moral character that any modern people of like development has possessed withal. Not that they are sunk in debasing vices. Quite on the contrary, their manners and social criteria are so high as to be accepted even in the civilized countries of the West. In respect to manners, the Cashmerians may be properly styled the French of India; but they are the most cunning, and perhaps the most avaricious of modern peoples, and their fame for lying is infamous. Cashmere has suffered to an unusual degree within the present century by natural disasters and the half-natural visitations of pestilence and famine. The country is visited with earthquakes; and it has been estimated that since the establishment of the British East Indian empire the population of certain districts has been reduced to one fourth of the original number.

Points of divergence of Cashmerians and Punjabese.

The people of the Punjab lie in ethnic character close to those of Cashmere. Indeed, there is no natural line of demarkation between the two countries either in geography or ethnic development. Mohammedanism, however, has not gained the ascendency in the one country as it has in the other, and the dialectical difference between the language of the Punjab and that of the Cashmerians is sufficient to classify the peoples as distinct. The population numbers nearly twenty million. The country is suffi-

ciently irregular in outline to have preserved, as in Cashmere, many of the original features of the Aryan race. In both language and religion they lie nearer to the primitive type than do the Cashmerians. Not only have they resisted the propagandism of Islam, but they have a strong antipathy for the followers of the Prophet, whom they despise as aliens in faith and nationality. As the original seat of the earliest Aryan institutions, the Punjab will ever remain a field of interest for the ethnologist and historian. It is, geographically speaking, to the Aryan nations what Italy is to Southern Europe—the ancient seat whence conquest spread and institutional forms were exported to foreign parts.

VIEW IN CASHMERE.—Valley of the Tirtan.—Drawn by G. Vuillier, from a photograph by Bourne.

Next in order of the Indian populations may be mentioned the great race of the Mahrattas. They are so called from the Sanskrit name Maharashtra, the ancient designation for the "Great Kingdom," or region. The country inhabited by them extends from the Arabian sea on the west to the Satpura mountains in the north. It includes the larger part of Western and Central India. By this designation are covered the provinces of Comean, Kandashesh, Berar, the British Deccan, half of the Nizam's Deccan, and a part of Nagpur.

Distribution of the Mahrattas.

Within the limits here defined, the Mahratta population numbers about twelve million. Considered as an eth-

ASPECTS OF CASHMERIAN LIFE.—Dancing Girl of Serinagur.—Drawn by Emile Bayard.

nic term, Mahratta is not definitive. Neither is it the name for a particular social caste or a given religion. It is rather one of those wide terms which history demands in the definition of a race somewhat composite in ethnic elements, and even diverse in religious and social qualities. Still the diversity is not sufficient to warrant a division into separate tribes. The common tie which binds the several peoples living within the regions defined above is language. They speak the Mahratti, one of the most widespread of the modern Indian tongues. In common with the other Indic languages, it is a dialectical form of Hindi, differing only from Hindustani as French differs from Italian. Though the tribes of Mahrattas are somewhat distinct in the different provinces, they are all true Indicans. We have Mahratta Brahmans, Mahratta Rajputs, and Mahratta Kumbis for the names of the several castes, all Mahrattas, but having nonintercourse with each other, from the same prejudices which prevail in other parts of India.

Extent of Mahratta population; the language.

In so far as the Mahratta race has fallen under the dominion of Great Britain, as in the Deccan, it has preserved to a considerable extent the features of the original stock from which it is descended; but in the Nizam's Deccan the people have yielded to the Mohammedan pressure, and to that extent have taken the character of the Islamites. In other districts the race is comparatively pure. Of these, Kolhpur, in the Southern Deccan, is perhaps the best example. The states of Sinde, Indore, and a part of Gujerat are nominally native, but have been considerably subjected to foreign influences. The native Mahratta princes and the attachés of their barbaric courts are Mahrattas, but a large part of the people are Hindus from other regions.

Variation in character from foreign impact.

The Mahratta Brahmans may be named as the best exemplars of the qualities and character of the Brahmanic caste in all India. In physical, intellectual, and moral development they are Brahmans at the best estate. The traveler can but be impressed with the serene countenance, the majestic walk, the lithe, straight figure, the high forehead, and features regular—almost Grecian in outlines—of these leading representatives of the ancient priestly order. The British government has found them the most able and energetic of all the natives of the empire; and he who visits India curious for instruction relative to the language, literature, and tradition preserved in the Sanskrit books, will find the Mahratta Brahmans to be the best of all his sources of information.

Mahratta Brahmans the highest type of Hindus.

कां तर देवाने जगावर एवढी प्रीति केली कीं, त्याने आपला एकुलता पुत्र दिल्हा, यासाठीं कीं जो कोणी त्यावर विश्वास ठेवितो त्याचा नाश होऊं नये, तर त्याला सर्वकालचें जीवन व्हावें.

SPECIMEN OF MAHRATTI.

All of the castes are represented among the Mahrattas. The Kshatriyas, or the Rajputs, are not numerous, and seem to maintain a rather precarious existence between the two preponderating castes of Brahmans and Sudras. The latter, lowest of the four great strata in which Indian society is divided—lowest with the exception only of the Pariahs, or serf caste, whose business it is to handle the dead—have preserved so many features of the aborigines and of the Scythians, who on several occasions have invaded

The lowest classes of Indican society.

the country, as to constitute them almost a distinct race. Indeed, an ethnic analysis would show them to possess a comparatively slight admixture of Aryan blood. But the Sudras of the Mahratta region, as in other parts of India, have conformed so much to the structure of the dominant castes as to be classified with them as a branch of the common family.

GROUP OF MAHRATTAS—TYPES.

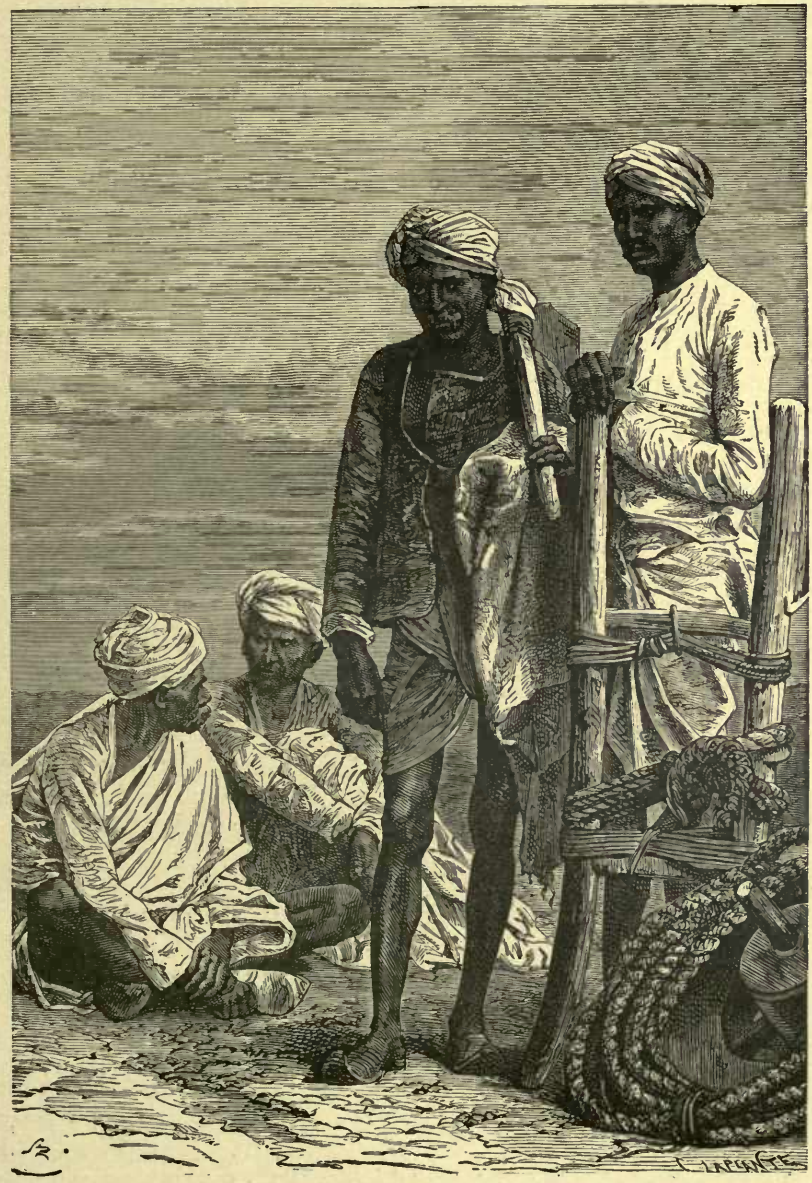
The contrast in features and person between the Sudras and the Mahratta Brahmans is sufficiently striking. The Sudra countenance is wanting in all those features of elevation which are possessed by the superior caste. They are small in person, though in common with most Indian races they are lithe, active, wiry, and able to endure. They are said to be exceedingly boorish in manners, and to have the looks of clowns. As compared with the inhabitants of the Punjab and the Cashmerians, the Sudra class of Mahrattas are physically weak and mentally inferior. They have vigor and tenacity without strength. They are essentially a race of mountaineers, and have in common with that class of people in every country of the world the qualities of courage and independence. They have but a slight social or political organization in their native places; but they have submitted to the discipline of the empire, and under the command of English officers have become an excellent soldiery. In the pursuits of life they are herdsmen, cattle raisers, drivers of stock and vehicles, rather than husbandmen or tillers of the

Contrasts and comparisons of Sudras and Mahrattas.

soil. They have some skill as weavers and manufacturers of armor, but have not otherwise distinguished themselves in the practical arts.

Geographically speaking, India and Hindustan are coëxtensive, identical. In a certain popular sense Hindus and Indians are convertible terms; but if the meaning of Hindus be determined by linguistic evidence, we shall find that not all Indians are Hindus. Hindustani, or Urdu, is a dialect of that mediæval Hindi which is the term for the second origin of all the Indic languages, as Sanskrit was the original root. Hindi is to Hindustani as the old Langue d'Oil is to French. Again, Hindustani is only one of the seven Aryan languages spoken in Northern India. The other six are the Punjabi, the Sindhi, the Gujarati, the Mahratti, the Bangali, and the Oriya. So if we reckon as Hindus only those whose vernacular is Hindustani, we shall find them occupying a territory of about two hundred and fifty thousand square miles, reaching from the Gandak on the east to the Sutlej on the west, and from the Himalayas to the Vindhya range.

It will already have become clear to the mind of the reader that generalizations with regard to peoples so widely dispersed and so differently developed as those of India are wellnigh impossible. Beginning with differences of person

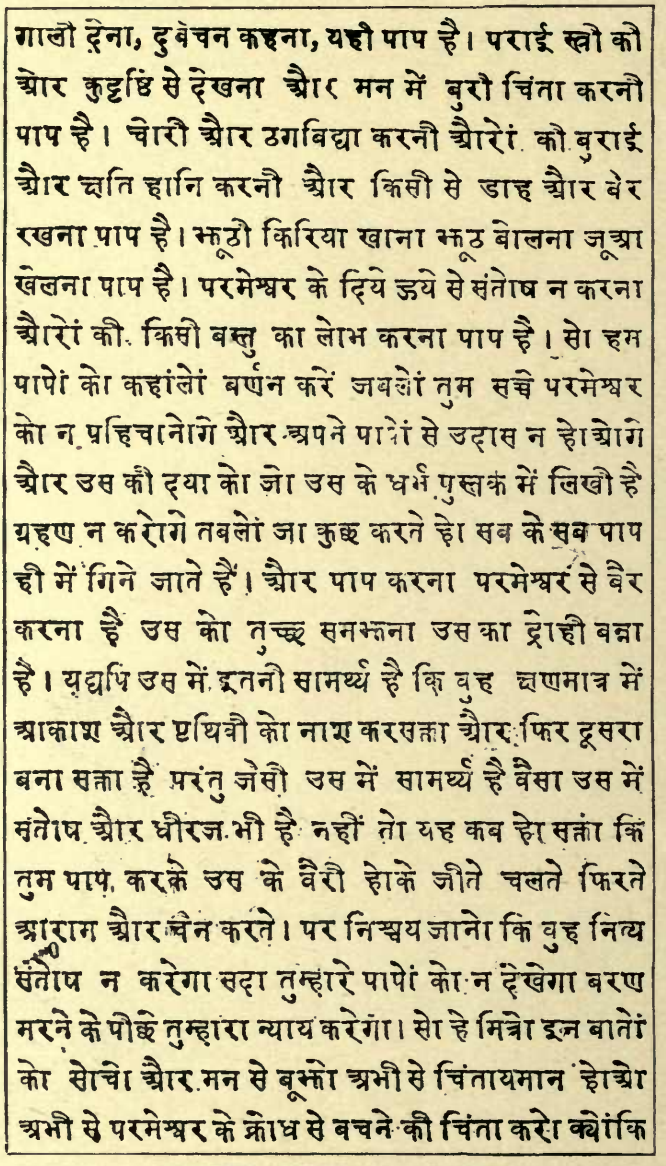


PEASANTS OF THE DOAB—TYPES.
Drawn by Emile Bayard, from a photograph.

Ethnic and linguistic relations of the Hindu peoples.

Difficulty of generalizing ethnic traits of great populations.

and running through the whole gamut of human attributes, there is so great diversity that only a few general outlines of the Hindu character can be presented with anything like accuracy. In mere physical characteristics the generalization is especially difficult. Personal descriptions of the Hindus are as old as the first contact of the Greek race with that remote region of the world. The astute observers—such as Nearchus—who followed the army of Alexander, or rather constituted a part of it, in the great campaign into the valley of the Indus, were as shrewd in their kind and hardly less fertile in descriptive ability than were the savants who accompanied Napoleon on his invasion of Egypt.

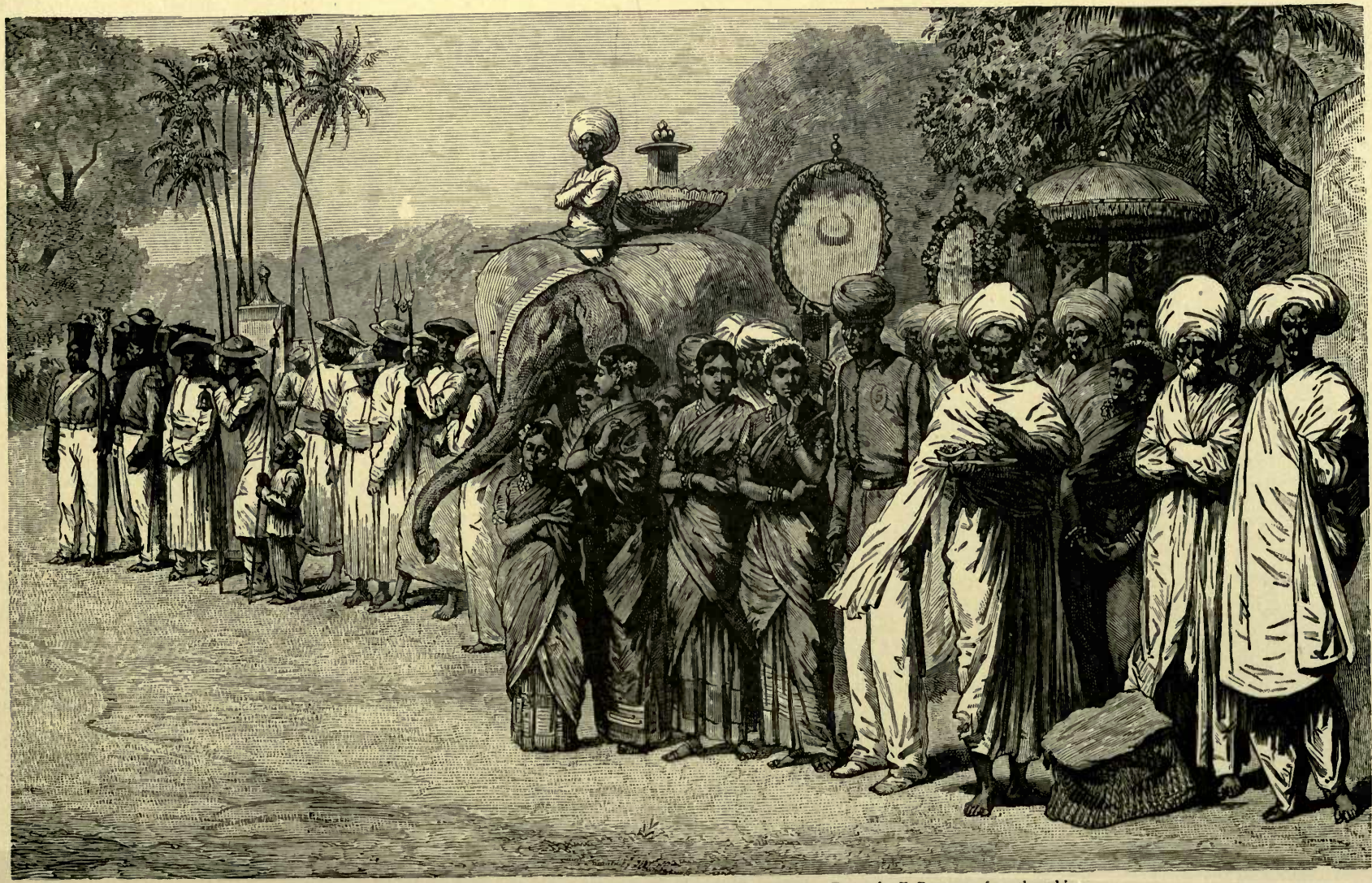


गाली देना, दुबचन कहना, यही पाप है। पराई स्त्री को और कुदृष्टि से देखना और मन में बुरी चिंता करनी पाप है। चोरी और ठगबिद्या करनी औरों को बुराई और क्षति हानि करनी और किसी से डाह और बैर रखना पाप है। झूठी किरिया खाना झूठ बोलना जूआ खेलना पाप है। परमेश्वर के दिये हुये से संतोष न करना औरों की किसी बस्तु का लोभ करना पाप है। सो हम पापों को कहांलों बर्णन करें जबलों तुम सच्चे परमेश्वर को न पहिचानोगे और अपने पापों से उदास न होओगे और उस की दया को जो उस के धर्म पुस्तक में लिखी है ग्रहण न करोगे तबलों जा कुछ करते हो सब के सब पाप ही में गिने जाते हैं। और पाप करना परमेश्वर से बैर करना है उस को तुच्छ समझना उस का द्रोही बना है। यद्यपि उस में इतनी सामर्थ्य है कि वुह क्षणमात्र में आकाश और पृथिवी को नाश करसक्ता और फिर दूसरा बना सक्ता है परंतु जैसी उस में सामर्थ्य है वैसा उस में संतोष और धीरज भी है नहीं तो यह कब हो सक्ता कि तुम पाप करके उस के बैरी होके जीते चलते फिरते आराम और चैन करते। पर निश्चय जानो कि वुह नित्य संतोष न करेगा सदा तुम्हारे पापों को न देखेगा बरण मरने के पीछे तुम्हारा न्याय करेगा। सो हे मित्रो इन बातों को सोचो और मन से बूझो अभी से चिंतायमान होओ अभी से परमेश्वर के क्रोध से बचने की चिंता करो क्योंकि

SPECIMEN PAGE OF HINDI BOOK.

The results were similar in both instances. Macedonia in the one case and France in the other was enriched with a great store of information drawn from the old and abandoned mines of the East. The Hindus of to-day are the same in personal appearance as they were in the days when they were described by the invading Greeks. This view is more true of the Brahmans than of the lower castes. The representations in the old Indian sculpture preserve the identical figure, the form, the features, and much of the apparel of the modern descendant of the Old Aryans. The Hindus, then, are of middle size. From this stature the Brahmans depart in one direction and the Sudras in another. That is, the Brahmans are fully up to or beyond the average height, while the Sudras and other lower caste peoples are below that standard—much below it. Ethnographers have estimated the average height of the Hindus, considered as a race, at one hundred and sixty-three centimeters, or sixty-four inches in English measure. This, perhaps, is a little above the average of the Japanese.

Brahmans and Sudras represent extremes of Hindu development.



ATTENDANTS OF THE RAJAH AND GUARD OF TANJORE—TYPES.—Drawn by F. Regamey, from the subjects.

Bodily characteristics of the Hindus; the color.

The bodily organs of the Hindu are symmetrical, but light. The limbs are often delicate, so slender indeed as to suggest weakness according to the stalwart Western criterion. As the traveler passes from the plains into the hill-countries, however, he comes upon more vigorous tribes. In Rajputana, and other districts similarly situated, the average height is greater and the bodily weight and strength are augmented. The complexion varies from almost white, through dark yellow, to bronze, or even to a sooty black. The last-named color is always indicative of foreign admixture, the absorption of that Old Dravidian stock which contributed the aborigines. There is a general intensification of the skin pigment as we proceed from the north to the south, from the mountain spurs to the burning coasts of Southern India. To the latter influence, that of climate, some ethnologists have been disposed to attribute the whole variation of color. It is true that among the Dravidians themselves, that is, the old population, so far as it is preserved in anything like ethnic purity, considerable diversities of color appear. Some Dravidian women are said to be almost white, but on the whole the race is dark-hued, so much so as to have furnished the larger part of the intenser color to the southern divisions of the Aryan population.

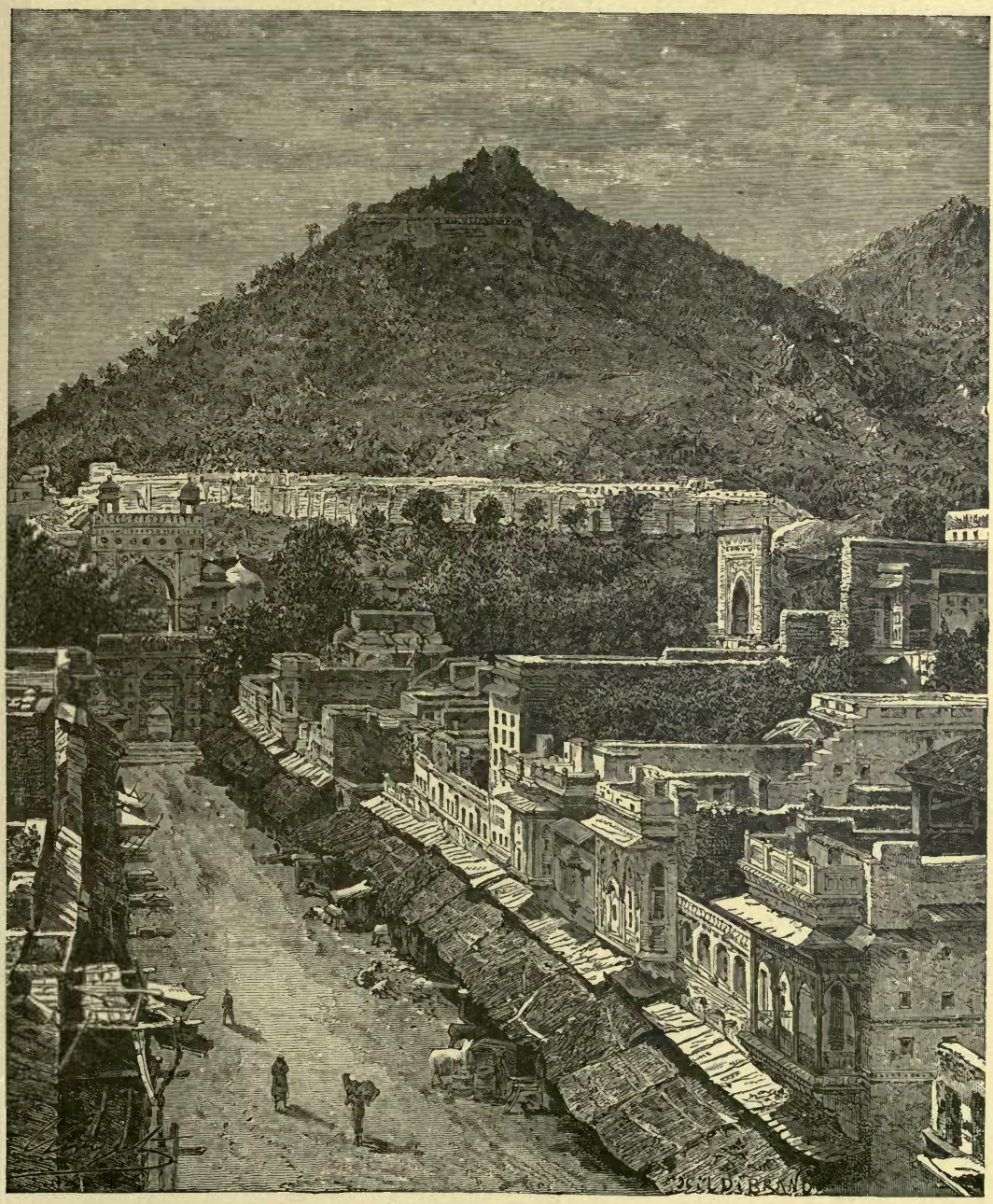
Special features of head and countenance.

The Hindus have preserved the straight or wavy and glossy black hair which the Old Aryans brought down from the highlands. The abundant beard is also well preserved in the descendants of the ancient stock. The habit of the country is to shave, except as to the upper lip, and tonsure of the head is common with the men, only a few curls being preserved at the poll and on the temples. Classified by the shape of the skull, the Hindus are mesocephalic; that is, the head is medium between the long-skull and the short-skull type of cranial development. The face is oval. The forehead is open, and indicative of good perceptions. It is rare to see in India a contracted and corrugated brow. Hindu eyes are large, dark colored, brown, or black. The eyebrows are curved into two arches. The nose is rather after the pattern called Roman, having not infrequently the aquiline contour which gives an imperious expression to the countenance. But this haughty feature is developed principally among the Brahmans.

CHAPTER XLII.—ARCHITECTURE, MANNERS, GOVERNMENT.

IF we look at the objective forms which are the expression of the ideal life of the Hindus, we shall find much of interest—some things to admire. Doubtless the most conspicuous fact in which the ideal life of man is expressed is architecture. It stands, as we have seen, in the triple category of necessities, the other two being food and clothing; but inasmuch as man is more than an animal, his shelter is more than a house. From the mere physical fact of shelter, the abode of the human race rises rapidly into higher forms; and elegance is added to necessary structure.

The Hindus have been immemorially noted for the extreme elaboration and extravagant taste exhibited in their buildings; and the same is true of their plastic arts. The traveler must needs feel himself in the western twilight of the Orient as he begins to scan the architecture of India. The style in general is Oriental. Flat roofs are the prevailing form, with projecting balconies and verandas. The name of the latter is from the Hindu vocabulary, and both the fact and the word have been carried into all Western nations. In connection with the Hindu



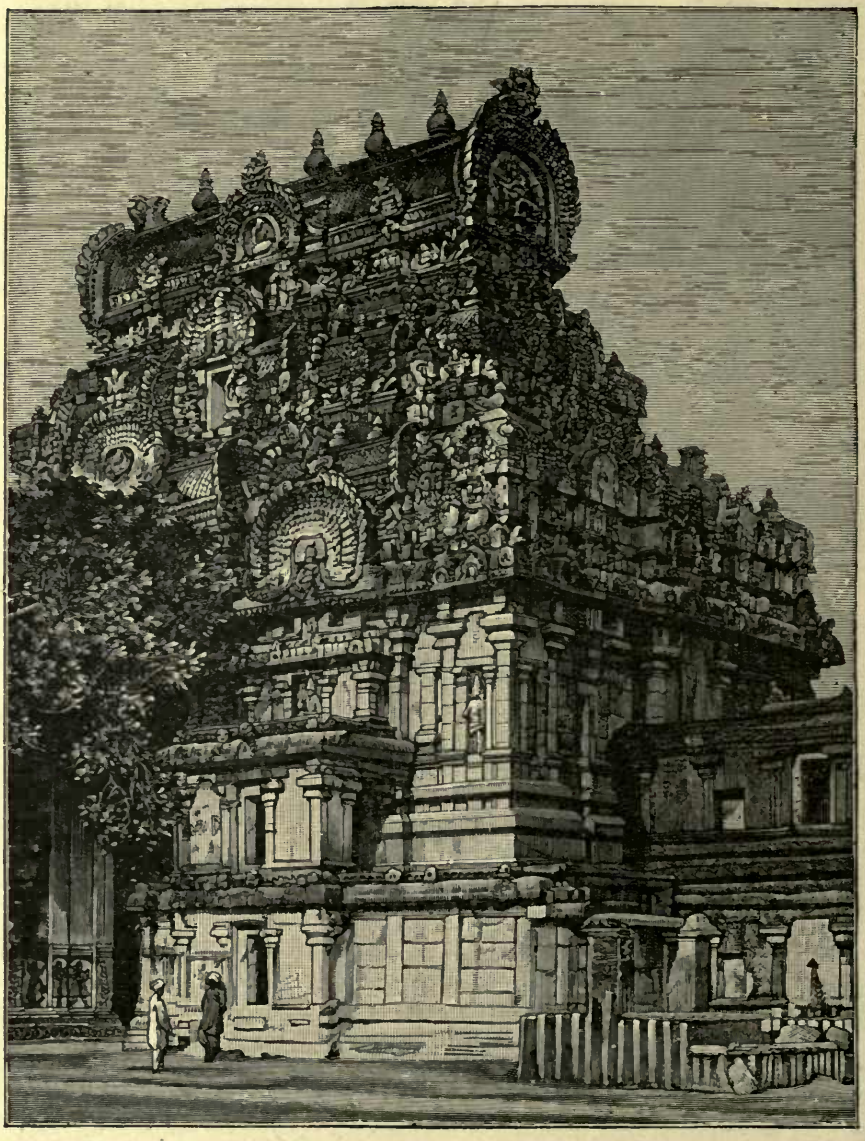
INDIAN ARCHITECTURE—FLAT-ROOF STRUCTURE.—BAZAAR OF KHOJA SYND.—Drawn by H. Clerget.

residence is nearly always found a garden, and in this is displayed the same kind of elaborate taste which we find in the permanent architecture of the country. The arbor, the trellis, the curious grotto, and many other parts of the gardener's art are only the details of the larger architectural art which has been developed by the Indian builders.

Extreme elaboration of the Hindu architecture.

It is in the nature of warm climates to put the people much out of doors. The same fact gives lightness to all classes of structure; but in a country subject to storms, strength as well as lightness must be consulted. Of the common and low-caste Hindus, the houses are plain and simple in design. In these the idea of shelter is predominant over what in the higher grades of society becomes ornamentation and elegance. It should be said, however, that the style of living among the rich, even Brahmans of the highest rank, is more simple than among Western peoples of like wealth and magnificent tastes.

Lightness of structure related to climate and outdoor life.



INDIAN ARCHITECTURE—ELABORATION OF ORNAMENT—GOPURAM.
Drawn by F. Regamey, from the original.

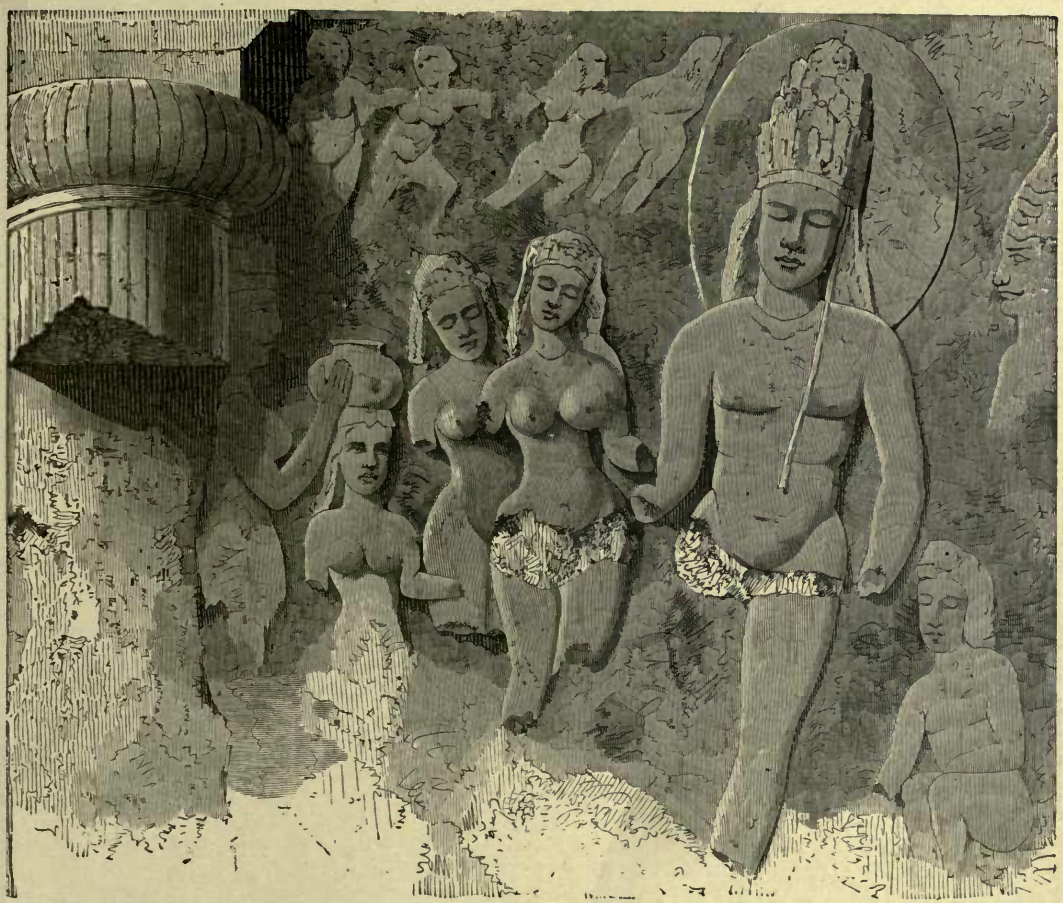
The ancient architecture and sculpture of India may almost take rank with that of Egypt, if not for abundance, at least for majesty. It is not the place to give an extended account of the old temples of the country, but an illustration may be drawn, once for all, from the famous isle and

The isle and cavern of Elephanta.

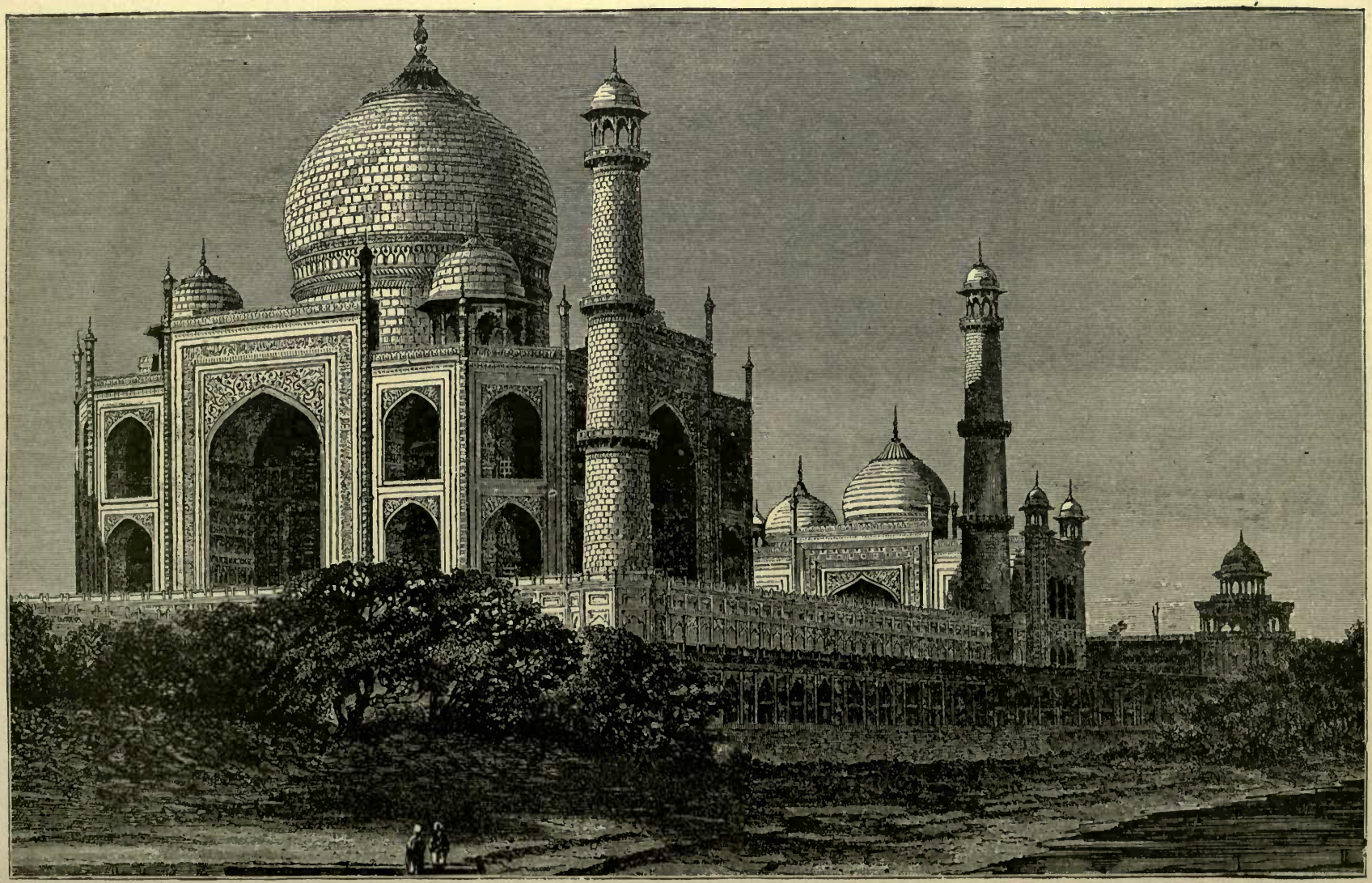
cavern of Elephanta. This island is situated about seven miles from Bombay. Within it are found the remains of those celebrated Hindu sculptures and excavations which have preserved to us the best notion of the ancient art of the race. Near the shore stands a colossal statue of the elephant from which the name Elephanta was given to the island by the Portuguese navigators. A short distance from the huge effigy is the entrance to the cavern. The same is about sixty feet in width and eighteen feet high. The pillars of support are cut out of the native rock. In the sides of the cavern are hewn many compartments which were dedicated as shrines to the old Hindu gods.

Unfortunately, many of the effigies of Elephanta have been mutilated or destroyed by the Portuguese vandals and the Mohammedan zealots of later times. Some of the statues, however, have been tolerably well preserved. In the center of the cavern is the colossal bust of the Trimurti, or Hindu Trinity: Brahma, Vishnu, and Siva. Some scholars, however, have in recent times decided that the triune figure is not intended for Brahma and Vishnu at all, but only to express the threefold aspect of Siva, the "Destroyer." The heads of the effigy are six feet in height, and the features have much of the majesty and repose peculiar to the sphinxes of Egypt. Critics, how-

Effigies of the Hindu gods in the cavern.



MARRIAGE OF SIVA AND PARVATI.—From the cave of Elephanta.



INDIAN ARCHITECTURE.—The Taj Mahal, Agra.—Drawn by E. Therond.

ever, have noted an unpleasing expression of the underlip, which seems to be too animal or faun-like for the deity. Egyptian analogies are also discoverable in the headdresses, which are ornamented. In the hand of one of the gods is a cobra de capello, and on the cap are set a human skull and an infant. Doubtless here we have an allegory of life and death in the infant and the skull and of the destroying agent by which the one becomes the other, in the serpent. Siva was the destroyer. Perhaps the cobra was his principal abettor.

On either side of the Trimurti stands the figure of a man leaning on a dwarf. To the right is a cavity hollowed in the wall, in which are a great number of mythological figures, the principal one being a double image of Siva and Parvati, an effigy half male and half female. To the right also is the four-faced statue of Brahma reclining on a lotus. It is one of the rare images of the supreme Hindu deity now preserved in India. Perhaps there is no space of like dimensions in the vaults, grottoes, or caverns of the world of so great interest to the antiquary as is the cave of Elephanta.

Agra the best seat for study of Indian architecture.

As a field for the study of Indian architecture in general, the district and city of Agra, in the Northwest provinces are, perhaps, the best of all in the country. The remains of old-time splendor, however, are not so ancient as the sculptures just referred to. The city of Agra is on the Jumna river, in latitude 27° 11′ north. It was the old native capital of the province. Until 1803 it was held by the Mahrattas, but at that time was taken by the British army, under Lord Lake.

Three structures within the city of Agra are known for their architectural beauty and grandeur. The first of these is the old palace of the native princes. It has a great court within, five hundred feet by three hundred and seventy feet in dimensions. The approaches to the court are by arcades and gateways of the greatest beauty and Oriental splendor. The hall of the palace is two hundred and eight feet by seventy-six feet in dimensions, and to this are adjoined two smaller courts, one of which was formerly the private audience chamber of the nabob and the other his harem. In Agra also is the celebrated pearl mosque, the most elegant specimen of Mohammedan architecture in all India. The dimensions of the ground plan are two hundred and thirty-five by one hundred and ninety feet. The court is a rectangle one hundred and fifty-five feet square. The courtyard is the center of interest. It is wholly of white marble, from the pavement to the dome. In design the pearl mosque is similar to the mosque of Dehli. The structure is noted for the absence of elaboration. A single inscription from the Koran, inlaid with black marble as a frieze, is the principal piece of sculpture in connection with the edifice.

The old palace of the native princes.

But the most remarkable example of the building skill of India is the great Taj built in Agra by the Emperor Shah Jehan in honor of his beautiful wife, Mumtaza Mahal. Here the empress and himself are buried. The building is, like the mosque, of white marble. It is surmounted by four tall minarets. The ground plan is a terrace, also of marble. The whole parallelogram, including the gardens and court, are eighteen hundred and sixty feet by one thousand feet in dimensions. The approaches are by arcades and magnificent gateways, the principal of which measures one hundred and ten feet in width by one hundred and forty

Character of the royal tomb called the Taj Mahal.

feet in height. Through this the traveler passes from the court to the garden. The tomb proper stands on an elevated platform eighteen feet in height. It is faced in every part with white marble, and is three hundred and thirteen feet square. At each corner stands a minaret one hundred and thirty-three feet in height. The mausoleum is in the center on a marble platform. It is one hundred and eighty-six feet square, but the corners are cut off by sections thirty-three feet in extent. Over the mausoleum rises a dome fifty-eight feet in diameter and eighty feet in height. It is doubtful whether any other emperor and empress who have ruled barbaric millions have had a more splendid tomb.

DRESS OF THE HINDUS—PRINCESS OF AGRA.

The dress and personal ornaments of the Hindus are now well known to Western peoples. Story and pictorial art have conspired to make familiar the bodily vesture and decoration of the Indian races. The materials of fabrication for apparel are generally linen, cotton, silk. The style of garment is Oriental. The costume of the men and the women differs in degree rather than in kind. The High Brahmans wear drapery rather than clothes. The Kshatriyas gather their garments about them with a belt. Everything is loosely worn. The Sudras, especially in the south, are but slightly clad, a large part of the person being exposed. In the schools and other assemblies the upper part of the body of the pupil is naked; and in the household and on the streets there is much exposure, but without vulgarity.

Dress and personal ornaments of the Hindus.

The dyeing of the hair and the beard is a common adjunct to effect in dress. It is customary to color red the nails of the fingers and toes. The eyelashes and eyebrows are dyed black with antimony. The fan is much used by both men and women, but not so universally as in Japan. Ornaments are profuse. Necklaces, bracelets, and earrings are universal. Flowers and pearls are worn in the hair. The ears and the septum of the nostrils are pierced to receive jewels and other pendant ornaments. Tattooing is but slightly practiced, but the features are frequently painted with marks and stripes across the brows, between the eyes, and on the neck. These marks constitute a kind of totem, distinguishing one caste from another.

In India there is great diversity in the manner of marriage. Each religion or superstition gives its own inflection to the ceremony. In one respect the usage is common, and that is the early age at which the woman is marriageable. At twelve or thirteen she is regarded as fit for

Ceremonies of marriage and estimate of the woman.

MANNERS OF THE HINDUS.—Reception at the Court of the Begum.—Drawn by A. de Neuville.

the wedded relation and for maternity. The oldest ceremonial required that the man take the woman by the hand and walk around an altar with her. Perhaps this still remains the fundamental idea in the nuptial union. The woman after marriage remains as she was before, a dependent of man. There is here a conflict between the Old Aryan recognition of the nobility, if not the equality, of woman and the Oriental view which holds her as a slave, a chattel. The Hindu woman has much more respect and honor than she of China, but is by no means the equal of the man. She is not wholly secluded in the house, but may go forth after marriage. In general, she is treated with respect. The almost universal aboriginal usage of giving presents to the bride's parents by the husband, as in purchase of her, is still maintained. It is in evidence that polyandry was much in vogue in ancient times, and polygamy is now frequent, particularly in those provinces where Islam is in the ascendant. The entrance of strangers into acquaintance and company with Indian women is strictly inhibited, and it has been with great difficulty that a knowledge of the manner of life of the Hindu household has been obtained by any alien.

The reader will have already perceived the general distribution of the Hindus over the larger part of India and their interfusion with other peoples. The race has extended north, south, east, and west, to the limits of the mountains and the sea. In Nepal, in the very shadow of the Himalayas, they are found associated with the Gurungs, the Magars, the Murmis, and many other races. In this region, however, it is the low-caste Hindus rather than the Brahmans that are mixed among the Nepalese. Further on in Assam the census shows nearly two million of Hindus, but they are, as in Nepal, of the lower order. It appears that Hinduism in this region made its way first among the kings and nobility. That is, the higher Assamese cultivated Hinduism as a faith, but the great mass of Hindus in Assam have been imported as laborers, to work in the tea gardens and in other pursuits of serfdom.

Extent of race interfusion in Hindustan.

This peasant class has, nevertheless, attained to a fair degree of home life and competency. The Hindu population has improved under British rule, and the character of the people has been greatly elevated since the last century. The Assamese are not very much distinguished from the Bengalese and Hindus in appearance. The person of the former is shorter and more robust, but the native is not so lithe and active as the Hindu. As already remarked, the Chinese type, that is the Thibeto-Chinese, has infected all the races of farther India, and the flat face, high cheek bones, and general physiognomy of the Assamese tells unmistakably the story of an influence from beyond the Himalayas.

Particular features of certain races.

Also into Burmah the Hindus have made their way, but not in so great numbers as in Assam. Here the language and the general character of the people is properly Indo-Chinese; and the race derivation from beyond still more strongly than in Assam discriminates the ethnic type from that of Bengal. The census of 1872 gives a population for the whole of Burmah of two million seven hundred and forty thousand, or an average of thirty-one to the square mile. Of these, the vast preponderance are Buddhists. The Mohammedans number about a hundred thousand, and the

Grading off of the Hindu into the Indo-Chinese type.

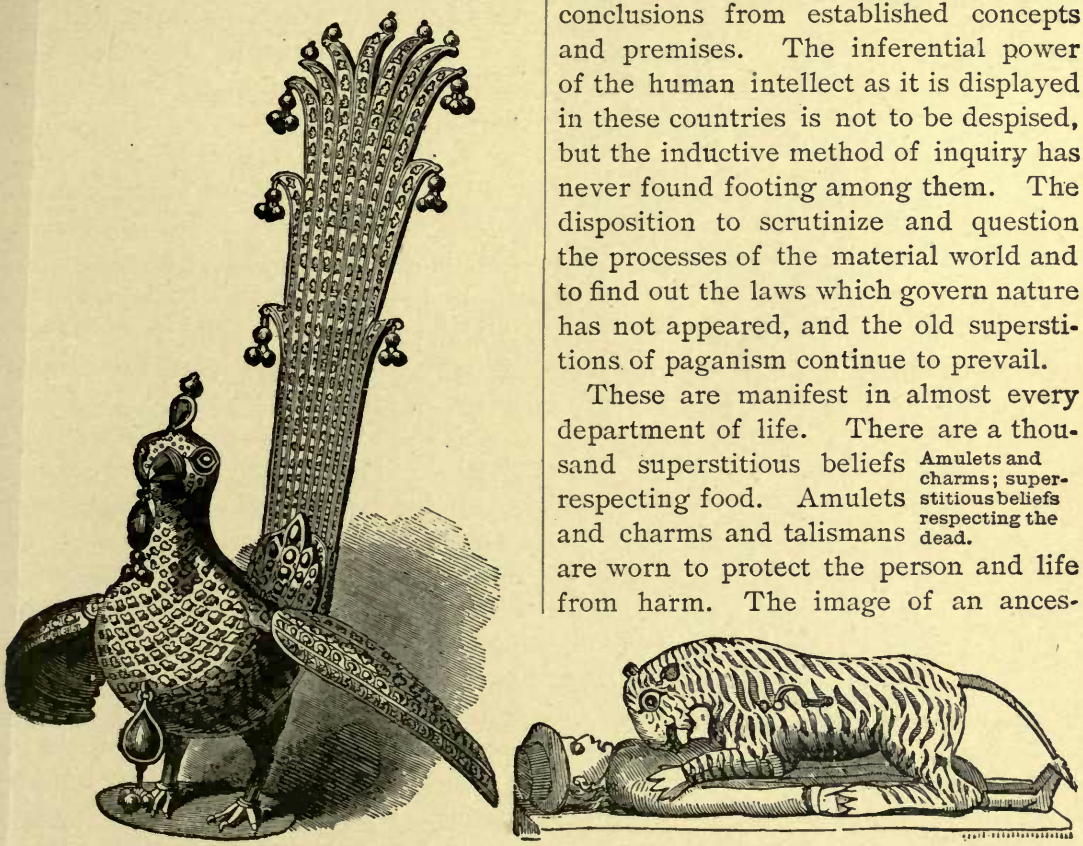
Hindus only thirty-six thousand. Of the whole number, one hundred and ten thousand are still classified as aborigines.

It is probable that India presents a greater variety of superstitions in an intenser form than any other country of the world. Except in the lower districts of heathenism, such as South Africa furnishes, the general fact called superstition has relaxed its hold somewhat upon the human mind. It is now clearly perceived that superstitious beliefs and practices can not coëxist with scientific knowledge. We have already seen that the peculiarity of the recent ages is the rapid extension of the knowledge of the laws by which the phenomena of the material world are governed. This is equivalent to saying that superstition is declining, losing its dominion and power over the mind of man. To this general fact India is somewhat exceptional. The peculiar tendencies of the Indian mind under the influence and discipline of Brahmanism have been unfavorable to the reception and dissemination of scientific knowledge. The Indian mind furnishes an example of a comparatively high development in abstract thought, in the ability to generalize and deduce conclusions from established concepts and premises. The inferential power of the human intellect as it is displayed in these countries is not to be despised, but the inductive method of inquiry has never found footing among them. The disposition to scrutinize and question the processes of the material world and to find out the laws which govern nature has not appeared, and the old superstitions of paganism continue to prevail.

Extent and variety of the Hindu superstitions.

These are manifest in almost every department of life. There are a thousand superstitious beliefs respecting food. Amulets and charms and talismans are worn to protect the person and life from harm. The image of an ancestor is swung about the neck in confident trust that the paternal spirit will follow his image and guard his descendant who wears it. One of the most striking superstitions relates to the dead. There is an abhorrent fear of all places where dead bodies have been brought or deposited. Even where cremation is employed, the spot on which the cere-

Amulets and charms; superstitious beliefs respecting the dead.



SUPERSTITIONS OF THE HINDUS.—Amulets Taken from the Body of Tippu Saib.

mony is performed becomes a terror to all who approach it; and the small buildings in which the ashes are stored are avoided as children would avoid an old ruin haunted by evil spirits. A like

HINDU FAKIR, CARRYING CIRCLETS OF IRON ABOUT HIS NECK.
Drawn by Emile Bayard, from a photograph.

fear possesses the Indian mind with respect to darkness. The night is dreaded. They who are willing to expose themselves like good soldiers in the hazards of battle, and who stand up against the enemy with a fair degree of courage, tremble with the coming of night. Doubtless it is the association in their mind of the facts of darkness and death that have made both appalling.

In common with the Oriental nations, the Hindus have a veneration for the dead. If they do not positively worship their ancestors in the manner of the Egyptians, they at least erect small temples to the fathers, and within these are placed pieces of wood on which are drawn images of the departed. The masses of the people have perhaps never been able to grasp the idea of the universal Brahma as the supreme God of the world, and as a result, they have fallen through the intermediate stages of polytheism into idolatry.

Shrines and effigies to the departed.

The superstitions of India, in part religious and in part merely mythological, are strikingly manifested in all ranks of society. Beliefs and practices having their origin in superstition have prevailed to the extent of creating whole classes of the Hindus sufficiently numerous to populate a kingdom. Thus, for example, the Mohammedan mendicants, widely distributed through all the Islamite countries, and known as Fakirs, have been recruited not on the basis of race, but on the lines of their peculiar and degrading superstitions. Of this great order of devotee vagabonds there are more than a million in India. They wander from place to place about the towns, villages, and countryside, constituting a pauper class, everywhere present and everywhere illustrating in their beggary and usages the combined results of race deterioration and superstitious fanaticism.

Superstition the basis of social classes; the Fakirs.

In some respects, however, the beliefs and practices of the Hindus are meritorious. They believe in cleanliness, in

washings of the body, in what may be called personal purity. The Brahmans enjoin the conquest of sensuality as a part of that virtue by which the soul may find eternal rest. The devotee is encouraged to master earthly thoughts and mere human affections as obstacles in the way of his perfection. All of this tends of course to asceticism, with its accompanying follies and vices; but it is probably true that the sages of India have reached as high a degree of self-mastery as any other devotees to the dogma of the mortification of the body as a means of eternal happiness.

Hinduism relieved by wholesome beliefs and practices.

Chieftainship was a part of the original structure of the Aryan race. It may not be known whether this fact in the organization of the primitive people was developed in the old household of the race, or whether it came forth as a concomitant circumstance of migration. Certain it is that migrating tribes must have their chiefs, their headmen, who lead and direct and take the responsibility. This chieftainship would inevitably take on the character of a military captaincy. The migration would traverse hostile grounds. There would be the clash of moving people with the aborigines and the conflict with other tribes in motion. He who could best control the action of barbaric battle would have great reputation. He would be a hero while the migration continued, and a prince as soon as the tribe had settled into permanent abodes. Such is the genesis of the half-military and half-royal petty kinglets whose figures are seen rising above the confusion and strife of the historical dawn.

Old Indian chieftainship becomes Hindu petty royalty.

We have already seen that in the countries possessed by the Indian races the Vedic bard, in the first place, and the Brahman priest afterwards, accompanied the chieftain who led the tribe, and invoked the deities to his aid in battle and conquest. The spectacle in the Indian valleys, as we discover it in the far twilight of history, is somewhat similar to that which reäppeared in the feudal ages in Western Europe, when the priest of Rome kept himself at the side of the barbarian chieftain until the latter was transformed into a feudal baron. So in India; with this difference, however, that the Brahman and the military chief were in that country of the same race and kindred. The union, therefore, of religious dogma with barbarian statecraft would be more intimate and friendly in India than in the West. The ascendency of the priest would also be more fatal to the natural evolution of political power and the establishment of secular forms of government in a country where the chieftain sympathized by kinship with the priest, than in lands where they two were in antagonism. This was one of the leading causes of the miserable condition into which the political institutions of India fell at an early age, and in which they have ever since continued.

Sympathy of the Brahmans and the military caste.

After the military chieftain in a barbarous age, leader and defender of a wandering tribe, has passed, by the settled residence of his people, into a prince, having a court and a retinue and even the beginnings of an administrative system, he must provide for the continuance of his rank, his reputation, his government. This is most easily and naturally done by transmitting it to his son. The priest would encourage this tendency; for the counselor of the father would have a favorable situation for influence with the descendant. He-

Primogeniture naturally follows military chieftainship.

INDIAN PRINCE—TYPE.—The Maharajah of Gwalior.—Drawn by A. de Neuville.

redity would thus become a natural element in the system, and primogeniture would follow as a secondary suggestion. All of these facts have appeared in the political structure of India, and in the order named.

Absolutism of the government of the Indian princes.

The government of the Indian princes has been an absolutism from the earliest ages. Everything has conspired to make the native prince a despot, and to perpetuate the despotism in his family. The right of the Indian nabob to tax his subjects for the support of the government and to supply the means of war rests with himself. Any part of the private property of the people, from one twelfth to one fourth of the same he may take as a revenue, without responsibility. In the same way he may enlist his subjects into the army. Custom has prescribed that those who serve in war shall be recompensed by a gift of land. In former times only the Kshatriyas were summoned for military duty. The other castes were permitted to pursue the vocations of peace without disturbance.

Rude methods of warfare; use of war elephants.

As to the methods of warfare, they were rude and traditional. The Indian weaponry was the same as that employed by all half-barbarous peoples. Until modern times bows and arrows, clubs, discuses, spears, swords, shields, and war chariots were the armor, offensive and defensive, of the native soldiery. These were never entirely supplanted until the establishment of the British East Indian empire. From time immemorial the elephant has been used in war. It may be frankly confessed that until the artillery of modern times was leveled against him he was one of the most formidable engines ever seen on a battlefield. From the days of Porus to the days of Nana Sahib the enemy had cause to look with dread on the huge monster as he raged in the conflict, bearing, as in a tower, his company of soldiers, and bringing down his tremendous trunk, like the fall of a Norway pine, upon half a legion at a blow.

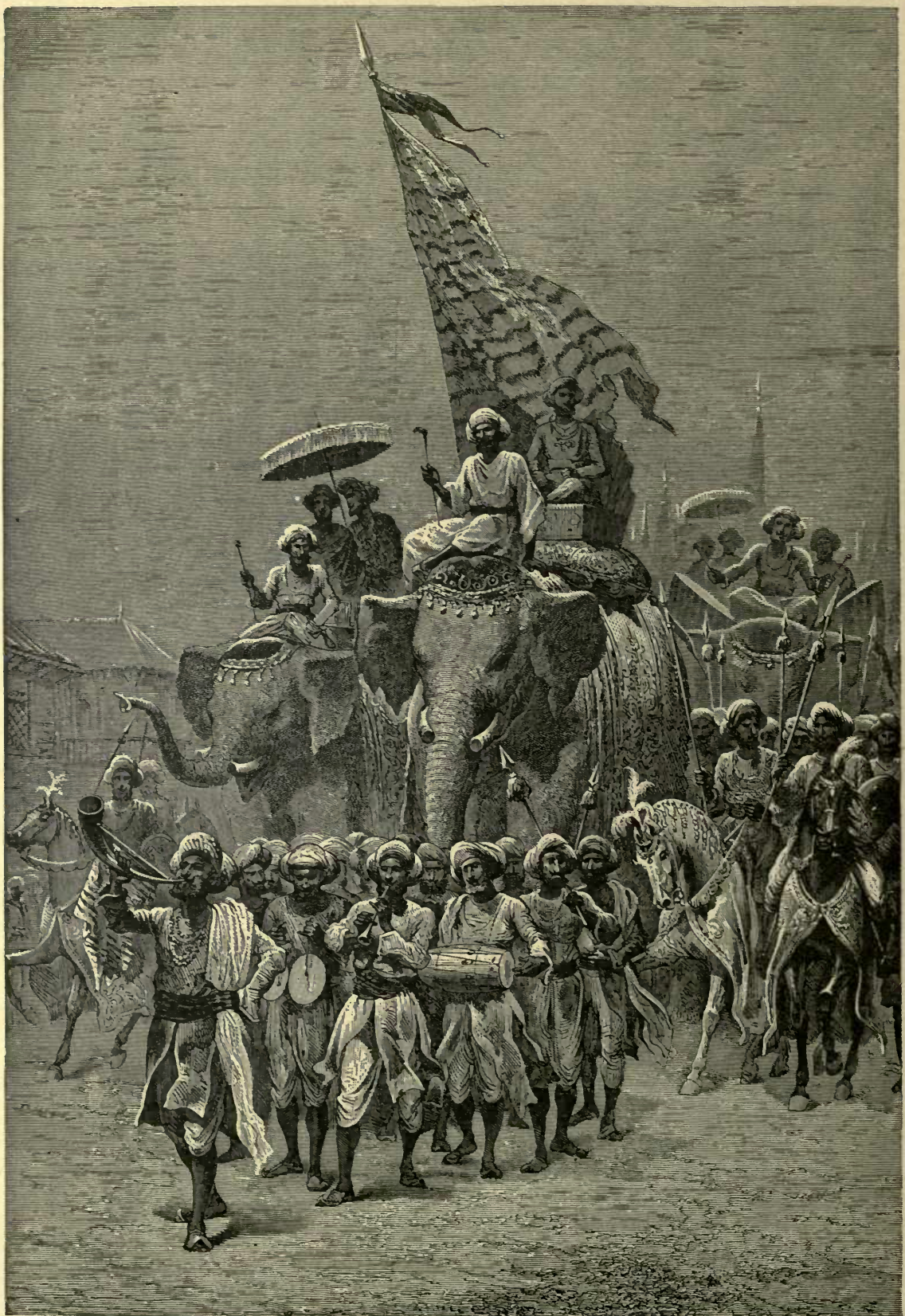
Superstitious reverence for princes and rulers.

All the conditions, social, civil, and religious, in the Indian countries have conspired to engender a superstitious veneration for princes and rulers. As among other ancient Oriental peoples, the king, the nabob, is regarded as half-divine. He is the representative of the unseen powers, and is responsible to them for his conduct. He is their equal and companion, and his right to rule is from on high. Against a prince thus hedged about with that divinity which accompanies kings, insurrection is regarded as most wicked and dangerous, and the punishment of disloyalty is always to the uttermost.

It were exceedingly difficult, if not impossible, to present a satisfactory exhibit of the distribution of the various races in India. We have now given a sketch of some of the leading elements of the political, social, and religious structure of the country; but much would remain if an accurate delineation should be attempted of the relations and tendencies of the various parts of Indian society.

General view of race conditions in Bengal.

The Hindus, to whom the foregoing pages have been devoted, constitute the leading element, the most widely distributed population of India. Perhaps a sketch of the condition of affairs in Bengal may serve as an illustration of the status existing in all the provinces and governments. Within this country there is an aggregation of peoples of diverse ethnic origin, speaking different lan-

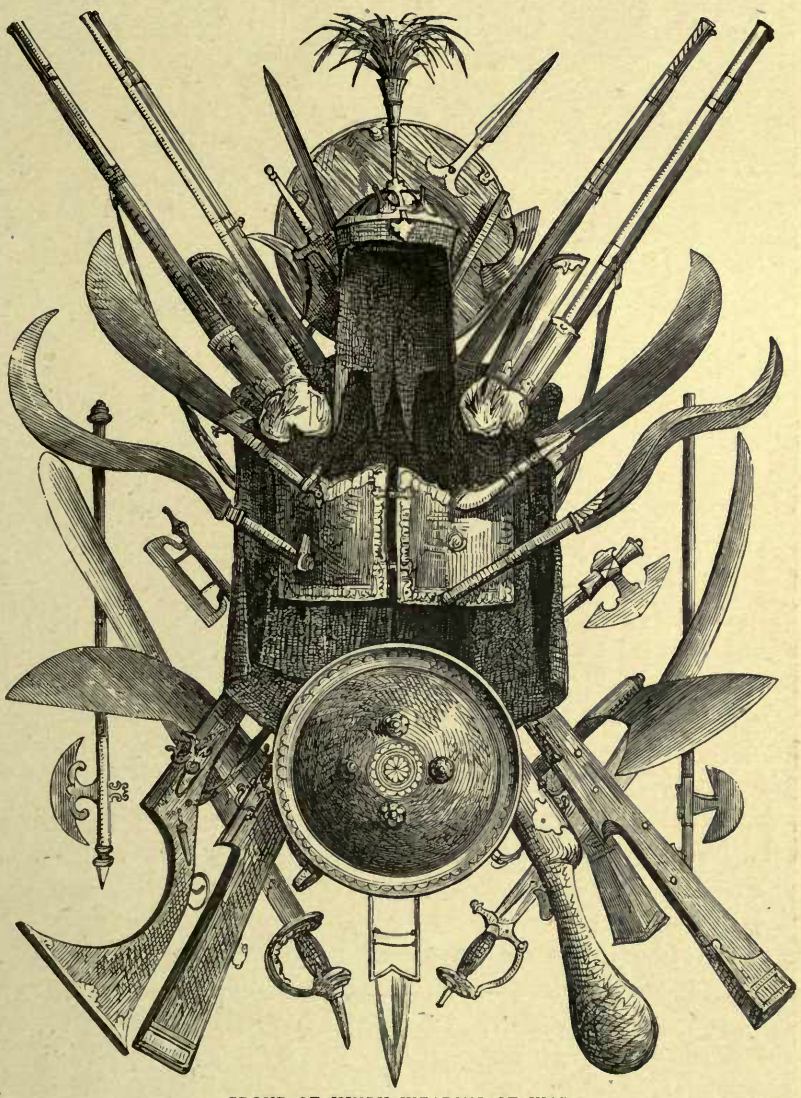


SOLDIERS OF THE RAJAH OF BARODA—TYPES.—Drawn by Emile Bayard.

guages. They represent eras of development as far apart as the earliest ages of history and the present day. These diversities exist in religious thought and practices, in political ideas, in race proclivities, and in every aspect of nationality.

According to the census of 1872 Bengal, which then included the province of Assam, had a population of sixty-six million eight hundred and fifty-six thousand eight hundred and fifty-nine, being fully equal to that of the entire United States at the present time. We thus have the remarkable spectacle of a lieutenant governor sent out from London, a distance of six thousand miles, to preside over a congeries of nations far exceeding the entire population of the United Kingdom of Great Britain and Ireland! The elements under this government—and Bengal was only one of many provinces under British dominion—were so diversified and contradictory as to make a governmental problem which no nation other than England would have had the political courage to undertake or the skill to solve.

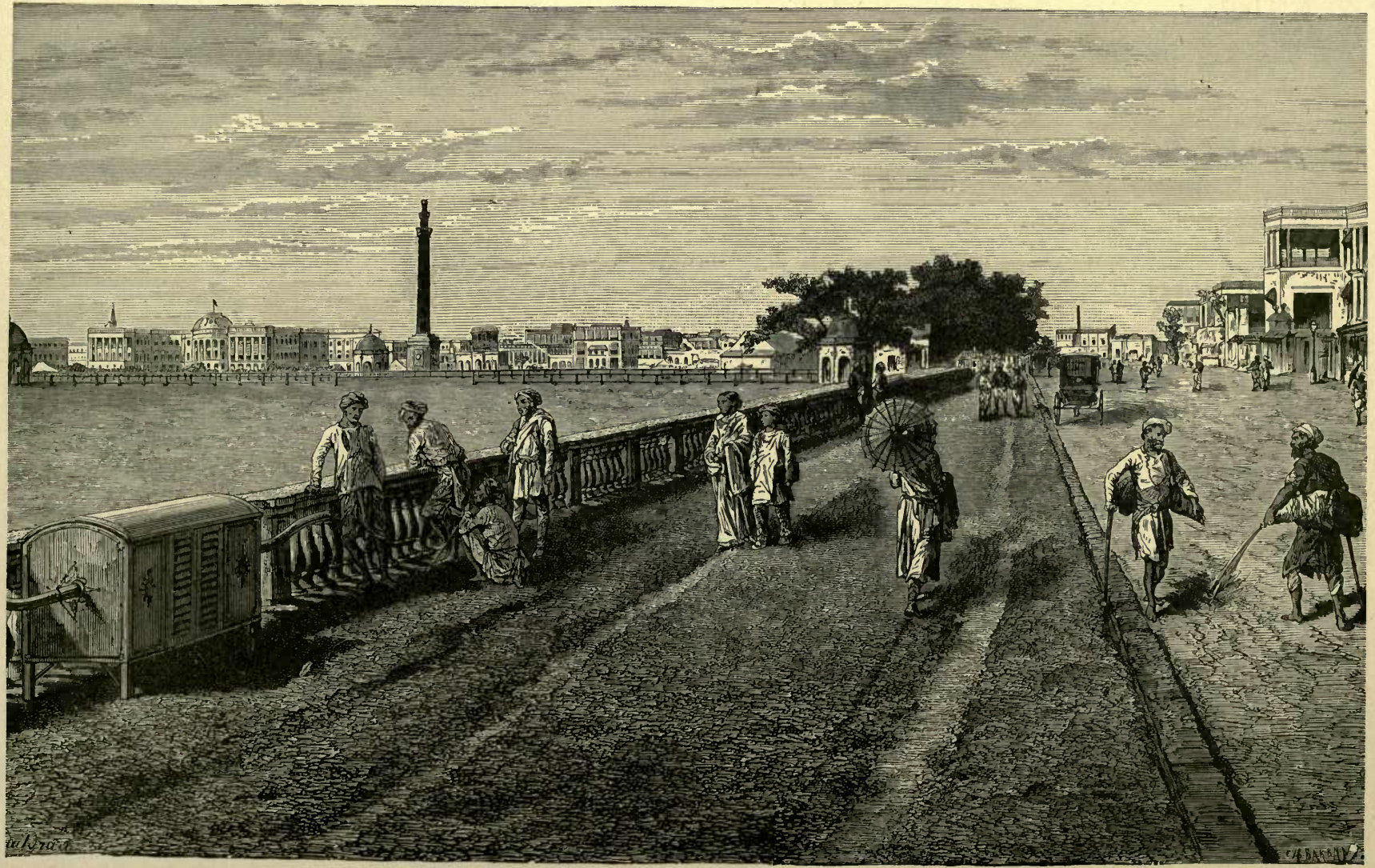
Aggregate of subjects under the provincial government.



GROUP OF HINDU WEAPONS OF WAR.

The people thus aggregated presented every type of the human evolution, from sheer barbarism and the grossest forms of superstition to a high degree of human enlightenment. Educated native noblemen from Bengal, full of the skeptical spirit of modern times, have come to London as diplomats, have sat in the clubs of that metropolis, and delivered speeches at public dinners among lawyers, bishops, and statesmen as skillful at fence, as witty, and almost as schol-

The Hindus present every grade of the human evolution.



VIEW IN BENGAL.—Esplanade in Calcutta.—Drawn by J. Gaildrau.

arly as they, while at the same time barbarous chieftains of their own race, in their own country, were sacrificing idiots and paupers on hilltops in order to make sure of the political advantages which the noblemen had gone to London to plead for! So great is the diversity of development among the Hindus.

These people, viewed as a whole, are most largely descended from the Aryan stock. Their languages are classical, and, strange to say, are more nearly in analogy with the current English tongue than are the Highland dialects of Scotland or the broken speech of Wales! Of the sixty-six million of Bengalese, forty-two and a half million are classified as Hindus; and of the remainder, about twenty and a half million are Mohammedans. The British lieutenant governor has thus under his sway in the single province of Bengal a larger Mohammedan population than that ruled by the Sultan of Turkey! Besides the two great peoples, the Hindus and the Islamites, a small percentage of other Indian races is diffused throughout the country, and to this must be added the Europeans, notably the English, who have sat down at Calcutta under a May and June temperature of one hundred and ten degrees F. to control and direct a mass of nations numerically in excess of all the other subjects of the queen.

Linguistic affinities; striking features of the British rule.

CHAPTER XLIII.—ISOLATED RACES—GENERAL ASPECTS.

IT remains to notice briefly one or two additional Indian families less widely known than the great races already described. In the western part of the country, on the slopes of the Hindu-Kush, are the Daradas, or Dards, and further to the west another people called the Sijah-Posh. The latter word signifies "black coats," because the men are mostly clad, as to their outer garments, in black hides. To these people the Mohammedans give the name of Kaffirs, or Infidels. It is believed that they migrated into India from Kandahar in Afghanistan.

We have among these extreme races the same dialectical differences, the same peculiarities, which belong to the other branches of the Indic family. These mountaineers are larger in person and of finer build than are the people of the Punjab, or even their old kinsfolk the Afghans. They have light skin, blue eyes, and blonde hair. They are more warlike than the people in the valleys of the Indus and the Ganges. They have an extreme aversion to the Mohammedans; and it is one of the tests of good citizenship to have slain one of the followers of the Prophet. Whenever this feat has been accomplished the slayer henceforth wears a feather in commemoration of his deed, and allows his hair to grow long.

Distribution and character of the Kaffirs.

In other respects the Kaffirs are like the Hindus. They offer sacrifices of cows and goats, and have ceremonies and feasts in honor of the gods, who are both male and female, according to the Indian theory. Like the greater races,

they venerate the souls of their ancestors. Amusements are popular, and music and dancing are cultivated to a high degree.

Perhaps after dispersed Israel, the Gypsies are the most remarkable people in the world in their distribution into foreign lands. Their name has been given to them by other peoples, who have supposed them to be of *Egyptian* origin. They do not call themselves Gypsies, but *Rom*, or *Romany*. The vernacular *Sinte* is always employed by them as their own ethnic epithet, and in this it is easy to perceive the word Sindh. Doubtless the original seat of the Gypsies was in the valley of the Lower Indus, whence their migratory habit of life has carried them into all quarters of the globe. Their dispersion among the Western nations began with the fourteenth century, and has extended to the present time.

Anomalous place of Gypsies in the ethnic scheme.

It is believed that the Gypsies were originally of the Pariah, or Sudra, caste, that is, the lowest order of Indian society. Their dialects have certainly been derived from Hindustani, but each tribe of Gypsies has adopted parts of the vocabulary and even of the grammatical structure of the languages spoken in the countries of their sojourn. Perhaps no people in the world have to a like degree incorporated into their own speech so much of other languages; and the incorporated parts remain without assimila-

The race originated in the Pariah, or Sudra, class of Hindus.

AGRICULTURAL LIFE IN INDIA.—GHADDIS CULTIVATORS.—Drawn by E. Zier, from a photograph by E. Bourne.

tion. Leland, in his work on the *English Gypsies and Their Language*, has given examples of the mongrel speech employed by these wanderers. The following two proverbs will suffice to illustrate the gross deterioration of the Gypsy tongue:

"*A cloudy sala often purabens to a fino*
"A cloudy morning often changes to a fine
divvus."
day."

"*It's sim to a choomer, kushti for kek till*
"It's like a kiss, good for nothing until
it's pordered atween dui."
it is divided between two."

By some Gypsy tribes their own language has been better preserved, and few traces of the speech of the country in which they chance to be sojourning can be found in their current expressions. The following paragraph from a Welsh Gypsy story will illustrate the character of the speech when free from English admixture:

Features of the Gypsy language illustrated.

"*Yeker a doi ses bearengaro ta vaver store*
"Once there were (a) sailor and other four
morsh; yek ses peltanengaro, ta ow vaver ses
men; one was (a) blacksmith, and the other was
koramangaro, ta sivamangaro, to pallano ses
(a) soldier, and (a) tailor, and the last was
kirchimackaro. Ow bearengaro potchedas e
(an) innkeeper. The sailor asked the
peltanengaro te vel apra ow doreav. Ow pelta-
blacksmith to come on the sea. The black-
nengaro pendas, 'Nau shom te ja te kerra boottee.'
smith said, 'No (I) am to go to do work.'
'So se tero boottee?' 'Te tasarra sastarn,'
'What is thy work?' 'To heat iron,'
chotchy ow peltanengaro, 'ta te kerravles undra
quoth the blacksmith, 'and to make it into
chichaw grengey.'"
shoes for horses.'"

The ethnic classification of the Gypsies was long a puzzling question. The most skillful scholars were at fault in attempting to fix their place. Here again, however, language furnishes the clue. The course of the Gypsies on their way to Europe and the West can be accurately traced by the admixture of foreign words which they have brought along with them. The oldest element thus incorporated with the Gypsy language is Persian; after that, Armenian, and so on to the West. Doubtless a few bands of this vagrant people have come into Europe from Egypt, but their sojourn in that country must have been brief, for no tribe has been found speaking a language in which there were traces of Arabic, as would have been the case if they had tarried long in Egypt or other parts of Northern Africa.

Language furnishes the clue for classification.

Much investigation has been given to the Gypsies as a people. Traces of them have been found west of the Bosphorus as early as the ninth century, but their presence in Europe is uncertain until the year 1346, when Catharine of Valois granted to the chiefs of Corfu the right to reduce to serfdom certain *Homines Vageniti*, or vagrants, who had come into the country. This same people pitched its tents along the Danube as early as 1417. In 1422 it was estimated that fourteen thousand of them had reached Italy. In August, 1427, a band numbering a hundred and twenty came to Paris, representing themselves as fugitives from the Saracens in Egypt. It is doubtless from this circumstance that the name Gypsy has been applied to the race. In 1530 they had become so numerous in England that Henry VIII issued a proclamation against them. In nearly every country of Western Europe statutes were enacted to prevent the incoming of Gypsies and to expel those who already arrived.

Apparition of Gypsy tribes in Europe and America.

At the present time it is estimated that Europe contains about seven hundred thousand of this race. They have made their way into the two Americas, into the islands of the sea, into Australia. Everywhere their character is the same. The form, the features, the manner of life and character of the Gypsies are repeated in all places where their tents or huts are found. The physiognomy is plainly Asiatic. The Gypsy face is the best representation to be seen west of the Atlantic of the face of the Hindu. The complexion is tawny: eyes black, glancing quickly to right and left, black hair, cheek bones high and prominent, lower jaw slightly projecting, mouth small, and teeth white and even. It is not uncommon to see among Gypsy women and girls figures and features that would be considered beautiful by the most critical judgment of Western peoples.

Development of Gypsy tribes in Europe and America.

BENJARI GYPSIES—TYPES.
Drawn by A. de Neuville, from a photograph.

The character of the Gypsy race is bad in the last degree. Both men and women are usually degraded. It is not, however, charged that they have licentious habits. They are addicted to every sharp practice by which rogues and thieves obtain property that is not their own. They are conscienceless, and are unacquainted with religious obligation. It has been declared by some scholars in language that there is no Gypsy word for soul or immortality or God. They pretend to the fortune teller's lore and to skill in palmistry, and to every other species of magic, from card-playing to the black art of the Middle Ages.

Mendicant and thieving character of the race.

Fixedness is the great central fact in the constitution of India. All of the races inhabiting that vast country or emanating therefrom betray in their beliefs and practices the unaltered conditions of a former life. While the Western Aryans, as we shall see hereafter,

Fixedness the central fact in Hindu life.

GYPSY TRIBE ON THE MARCH.—Drawn by A. de Neuville.

have been almost infinitely inflected in their development, the Indic branch of the race fell at an early age into established forms, to amend or alter which has been regarded as innovation and sacrilege.

In this respect India may be ranked with the Egypt that was and the China that is. Doubtless the Hamites in ancient Egyptian society were more fixed in a given social structure, less subject to fluctuation and evolution into new forms, than are the Indic races of to-day. The Chinese also, who change not at all from generation to generation, who regard all movement or progress from the old and approved constitution of things as a useless and dangerous departure from the best attainable standard, are doubtless an intenser form of social completeness and conservatism than are the Hindus. But as compared with the flexibility and progressive tendencies of all the Western peoples the nations of India are in the strongest contrast.

Comparisons with the Hamites and the Chinese.

It is impossible now to tell for how long a time even the details of everyday life, the circumstances of manners and dress, the rules of caste, and the laws of social propriety have remained unaltered. The styles of personal adornment described in the oldest records of the race are still patterned and repeated by the Indian jewelers. The ornament has been immemorially regulated by rank. Even wealth and profusion have not been able to pass the prescribed limits of form. The law books of Manu fixed the limits and the details of caste and determined the paraphernalia of each. All descendants of Aryans should wear the sacred cord around the person. The cord must pass over the left and under the right shoulder, and be placed there when the wearer was initiated into his caste. The cord of the Brahman should be composed of three cotton threads. The Kshatriyas, or warrior caste, had also a threefold cord, but the strands were of hemp; and that of the Vaisyas was made of triple strands of wool.

Preservation of the ancient dress and regalia.

Custom having once determined the symbol, it must remain unaltered age after age. The Brahman's belt must be made of sugar cane. He must wear the skin of the gazelle. His staff must be of bamboo and reach to the top of his head from the ground. The soldier's belt must be made of bowstrings. His garment must be a deerskin, and his bamboo staff must reach no higher than the forehead. The belt of the Vaisya must be made of hemp. His garment must be a sheepskin, and his fig-tree staff, cut from an unpeeled branch, must reach only to his nose. Let none violate these things, for they are a part of the usage and the law of the land. Opinions must not change, neither must the outer forms of society. True enough, the Sudras may clothe themselves as they will, for they are no true caste, but only a residuum, a melange, left on the soil after the three major castes have been determined and defined. These things are necessary that the purity of the dominant races may be preserved. Change will lead to confusion, corruption of blood, deterioration of manners, destruction of race character, national shame.

Usage of the belt; clothing of the Sudras.

Life is growth. It is as truly so of the tribe as it is of the individual; of the nation as of the tribe; of the race as of the nation. The part of the human body which is not used, which does not expand and grow by the addition of new

Race life, once vigorous, may pass into atrophy.

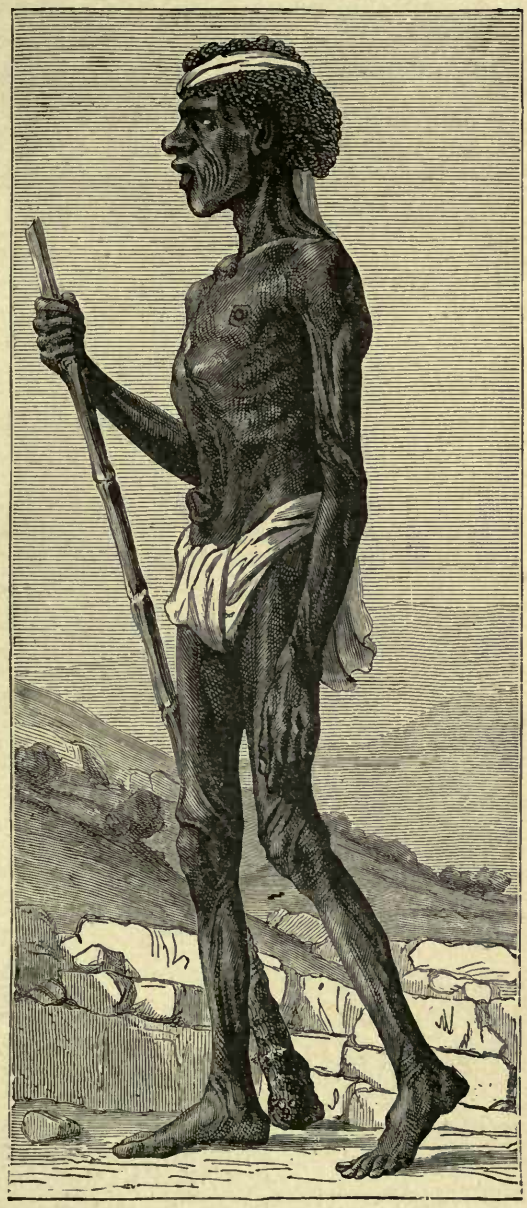
elements, the substitution of living tissue for that which is broken down and expelled, will suffer atrophy. It will cease to act. It may not possibly decay. It may even retain a certain circulation of the blood and a sort of nervous vitality, but in other respects it is dead. The same is true of national life, and even of the institutional forms of society. They must progress or fall into a shriveled and useless condition, unfitted for the altered relations under which they pass by lapse of time and change of circumstance.

India thus presents to the modern inquirer a fixed surface. There is less perspective in Indian society than in almost any other of the world. This is to say that the existing form has the same character that it had ages ago. In any Western state, if a cross section be made of society as it now exists, such section will present phenomena wholly different from what we would have discovered in the sixteenth century, and the latter in turn would be equally distinct from the aspects discovered in the sixth century. The art of China is said to have no perspective. The Chinese drawings and paintings are all made as though the objects delineated had been viewed *from above* instead of horizontally. The institutions of India have this fixed expression. They are as if sketched from above, and the forms of things have no converging lines behind them.

Lack of perspective in Hindu society.

Since the beginning of European ascendency in India, however, the impact of Western influence upon the crystalized institutions of the country have scattered the germs of change. There is a slight relaxation even of caste. The Brahmans themselves have separated somewhat into higher and lower orders, and in some instances have engaged in secular employments. It is not unusual to find a Brahman in the military service of the empire, and

Western influence begins to prevail in India.



THE PARIAH DJONGAL OF SARGUJA—TYPE.
Drawn by Emile Bayard.

in some parts of the country what are known as "plow Brahmans," or agriculturists, are found. Though engaged in the pursuits of the field and garden, these members of the Brahmanical order

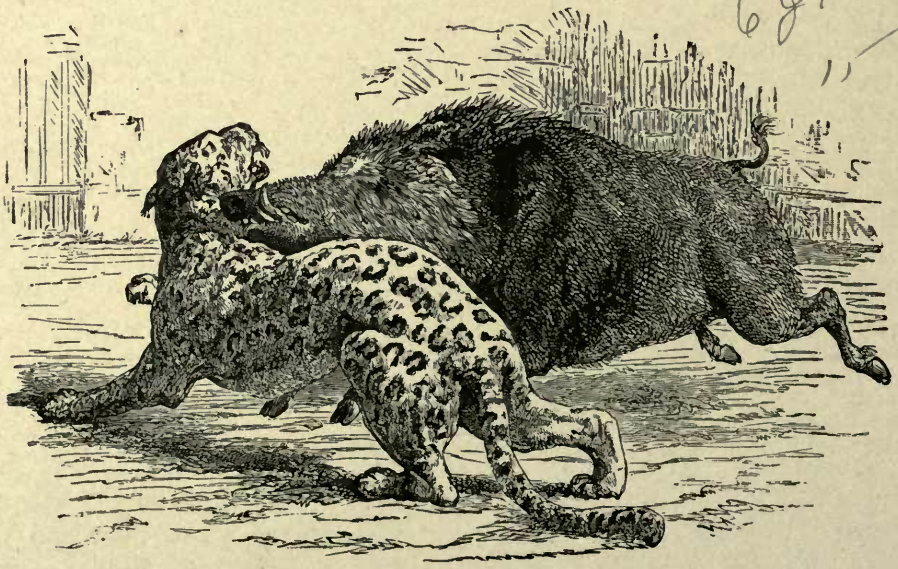
still hold fast to their old distinctions, wear the Brahman's thread, and claim and receive recognition as belonging to the highest caste.

The subsidence of the Kshatriyas, or at least the subsiding *tendency* among them into industrial pursuits, is still more marked. It can hardly be said that the Pariahs are now a caste separate from the Sudras. They are rather a lower class of Sudras than a distinct division. These changes, noticeable by the close observer in recent times, are exceedingly slow, and are made against the whole force of the existing order; but they foretoken an ultimate regeneration of the social order and institutions of the East.

Tendency toward the neglect of caste distinction.

We have now completed the intended sketch of the Eastern divisions of the Aryan race. In a former book we followed the migrations of these great and populous nations from their old seats east of the Caspian into the regions of their subsequent occupancy and development. In the present book we have noted the past and current aspects which the various nations springing from the primitive stock have presented in ancient and modern times. The object has been to give to the reader an accurate general notion of the ethnic character of these peoples. Geographically, we have found them distributed from the Iranian Ossetes along the northern spurs of the Caucasus, in latitude forty-five degrees north and longitude forty-five degrees east from Greenwich, to the inhabitants of British Burmah, in latitude ten degrees north and longitude one hundred and two degrees east. Within these extremes are distributed some of the most populous nations on the globe; and if the civilizations of these peoples do not present to the inquirer of to-day so promising and inspiring a view as the more vigorous and expanding developments in Western nations, there is, nevertheless, a perpetual fund of interest and a limitless revenue of information to be found among the races and institutions of the old Iranian plateau and the teeming valleys of India.

General view of the subject to present stage of the inquiry.



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